

# NATIONAL WEATHER SERVICE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



**National Weather Service**  
**Wakefield, VA**  
**[Weather.gov/Wakefield](https://www.weather.gov/Wakefield)**



**NWSWakefieldVA**



**@NWSWakefieldVA**

# Severe Weather Spotter Training 2022



**National Weather Service Wakefield, Virginia**

Severe Weather Spotter Line: **1-800-737-8624**

NWS Wakefield Webpage: **[weather.gov/akq](https://www.weather.gov/akq)**



**@NWSWakefieldVA**



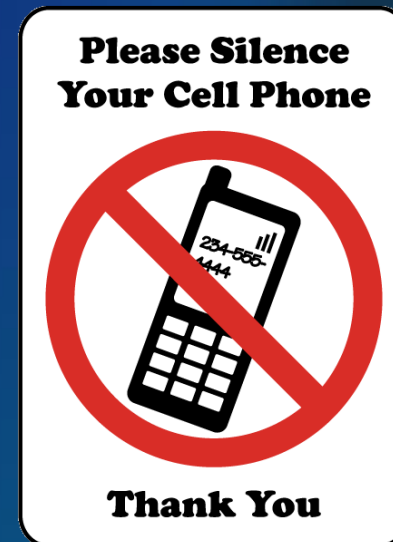
**NWSWakefieldVA**





# What Will Be Covered Today...

- Importance of Spotters
- Types of Severe Weather
  - *Thunderstorm Formation*
  - *Straight-Line Winds*
  - *Hail*
  - *Flash Flooding*
  - *Wall Clouds/Funnel Clouds/Tornadoes*
- Reporting Procedures
- Spotter Safety
- Interactive Quiz



# Who Are NWS Storm Spotters?



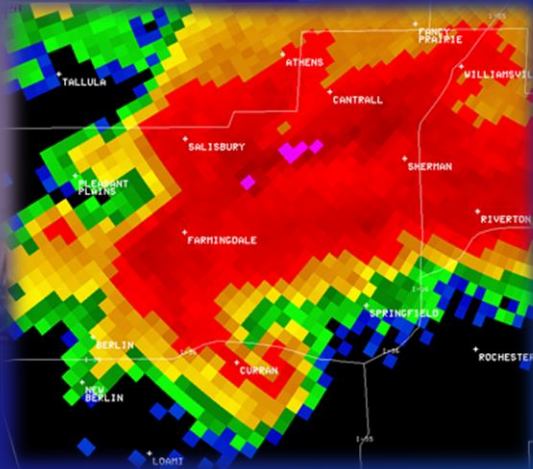
- Volunteers who report real-time severe weather reports to NWS
- Spotter information is crucial for the NWS to issue timely, accurate warnings
- Spotters can and do keep our communities safe during hazardous weather!



# Why WE need YOU!

## Why Spotters Are Needed

What we see:



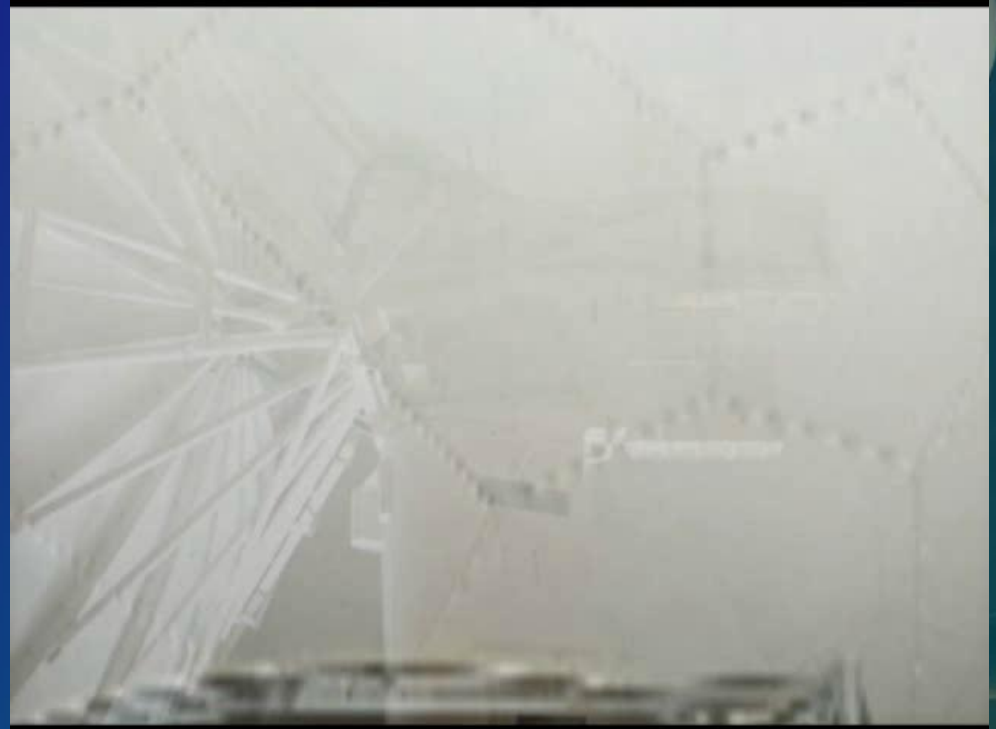
What you see:



- *The **ONLY** way for us to know is to get ground truth from spotter reports!*
- *Real-time verification adds credibility, enhances public response, and improves warning accuracy.*



# NWS Radar – Operations



- National Weather Service  
WSR-88D Radar

# NWS Radar – Operations

NWS Doppler radar enables us to estimate:

- Reflectivity (amount or strength of the signal)
- Velocity (direction in which the air is moving)



However, there are some significant limitations...



# NWS Radar – Limitations

Near the radar, the beam is lower to the ground and “sees” low in the storms.

As distance increases, the beam’s altitude also increases and can overshoot the core of heavier precipitation.

Radar beam

Radar beam cannot see the lower portion of storm *B*.  
Resolution is poor at distances far from the radar.

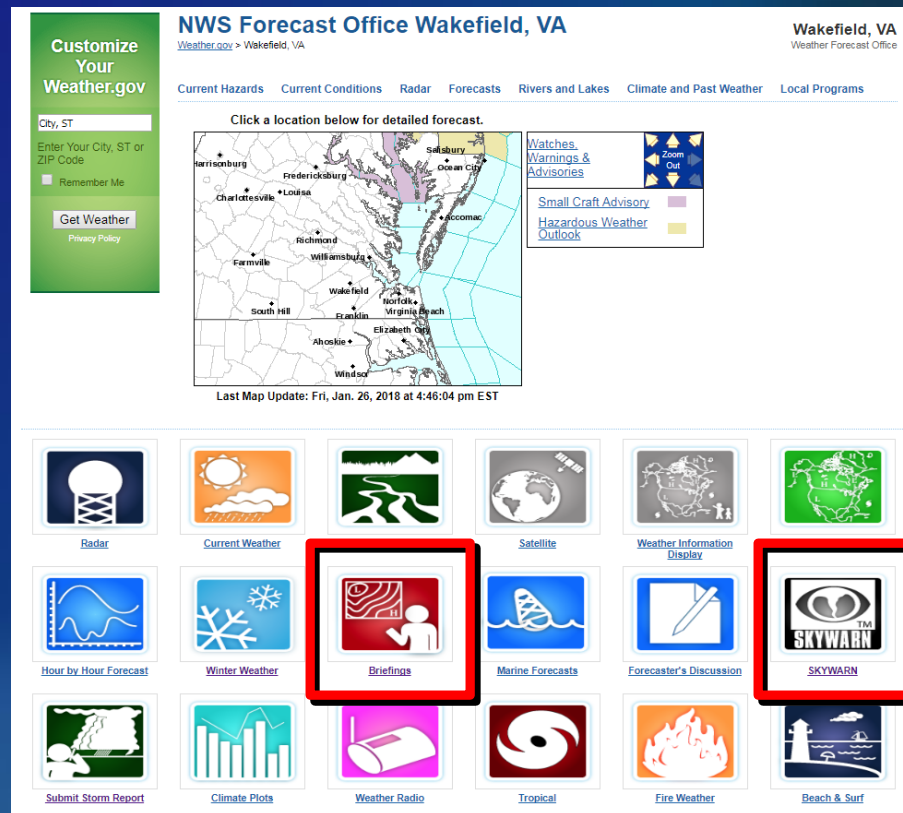
# Spotters + NWS = Saved Lives!



# Hazardous Product Definitions

- Weather.gov/Wakefield
- Always keep up with the latest forecasts, statements, and warnings...

- For safety
- For spotting
- For awareness

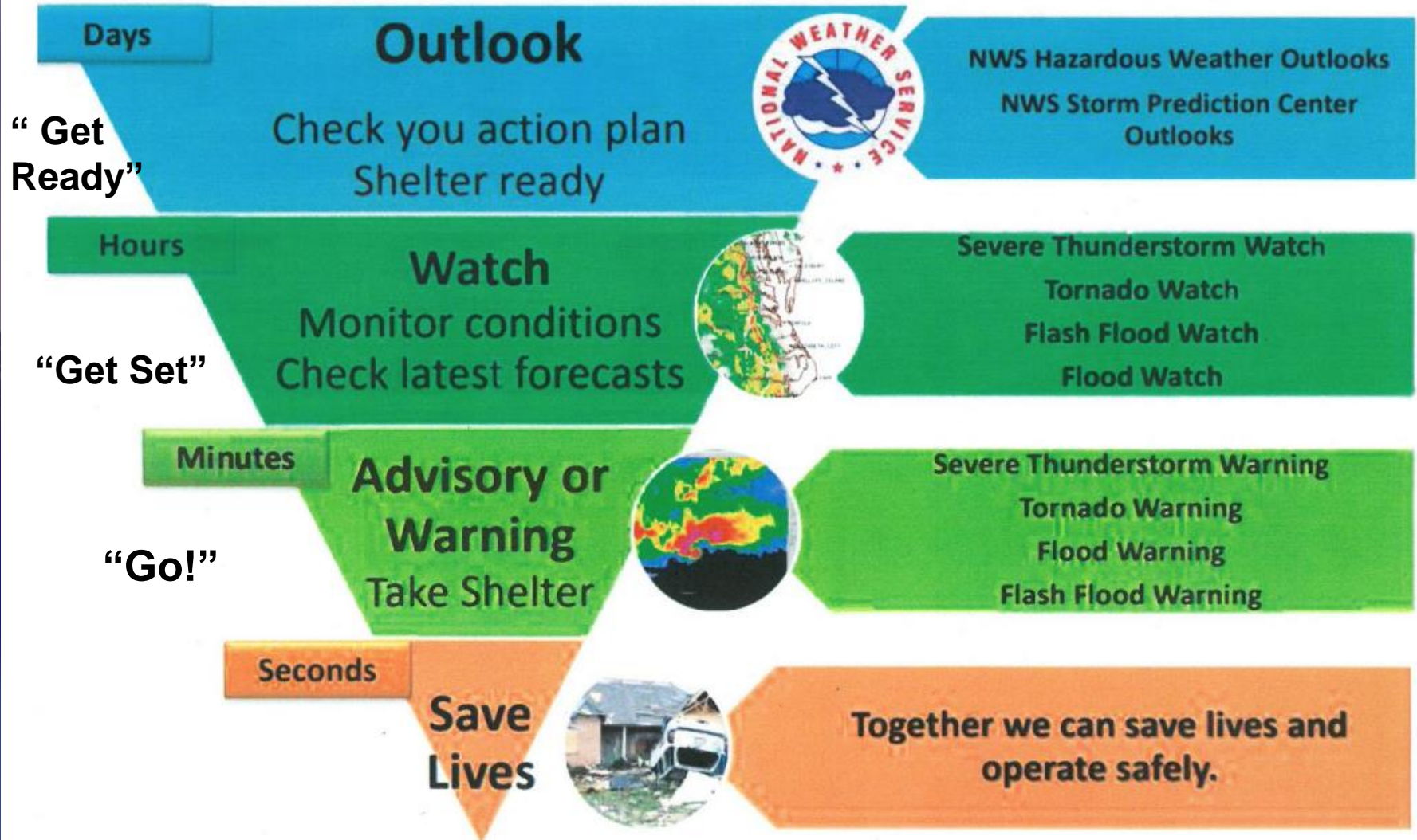


What are some ways we provide this information?





# Severe Weather Preparedness



# Understanding Severe Thunderstorm Outlook Categories



General Thunder	<b>1</b> Marginal (MRGL)	<b>2</b> Slight (SLGT)	<b>3</b> Enhanced (ENH)	<b>4</b> Moderate (MDT)	<b>5</b> High (HIGH)
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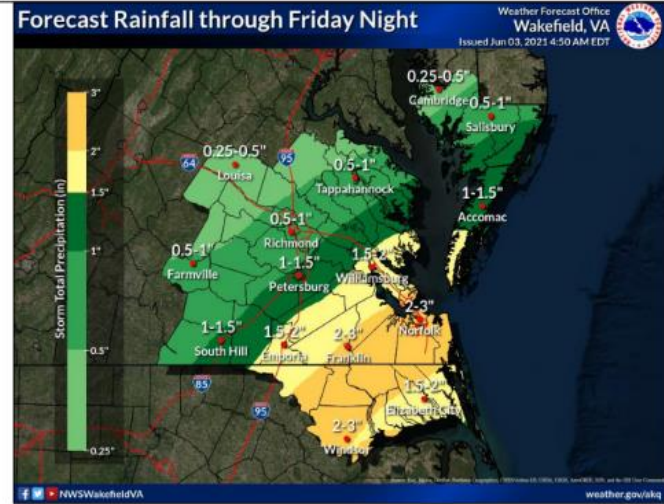
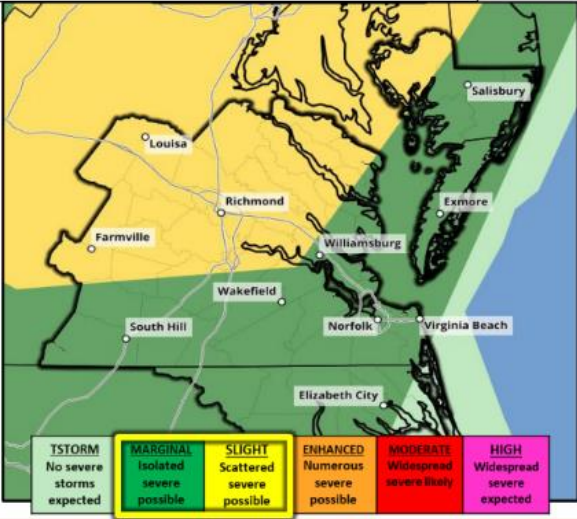
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Remember weather is

No Matter th  
Keep a watc  
Ensure multi  
Have a plan!  
Be Weather-

OVERVIEW		TIMING
<ul style="list-style-type: none"><li>• Showers and thunderstorms are expected to produce 1 to 3 inches of rain across portions of southeast Virginia and northeast North Carolina (with locally higher amounts) today into Friday.</li><li>• Damaging wind gusts and potentially a weak tornado are possible with the strongest storms.</li><li>• There may be instances of flooding, especially in urban/poor drainage areas.</li></ul>		HAZARDS & IMPACTS
		<ul style="list-style-type: none"><li>• Strong wind gusts from thunderstorms could result in downed trees/power outages. A weak tornado or two also cannot be ruled out.</li><li>• Heavy rainfall could result in flooding of urban and poor drainage areas. Flooding of rivers, small streams, and ditches is also possible. <u>A Flash Flood Watch is in effect for portions of SEVA and NE NC.</u></li></ul>
		ADDITIONAL INFORMATION
		<ul style="list-style-type: none"><li>• For Severe Weather: This afternoon into tonight.</li><li>• For Heavy Rainfall/Flooding: Through Friday morning.</li><li>• Remain weather aware today and monitor the latest forecasts, watches, and warnings from the National Weather Service.</li></ul>



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# Hazardous Weather Outlook

- Discusses potential for hazardous weather within the next week (especially the first 24 hours)
- Issued at least once a day
- Updated more frequently during significant weather

VAZ060-061-067>069-080>082-088>090-093-513-514-523>525-231100-Prince Edward-Cumberland-Nottoway-Amelia-Powhatan-Dinwiddie-Prince George-Charles City-Sussex-Surry-James City-Isle of Wight-Western Chesterfield-Eastern Chesterfield (Including Col. Heights)-York-Newport News-Hampton/Poquoson-649 AM EDT Sat Apr 22 2017

This Hazardous Weather Outlook is for central Virginia, east central Virginia, south central Virginia and southeast Virginia.

.DAY ONE...Today and Tonight.

Isolated thunderstorms will be possible along and south of a Farmville to Wakefield line this afternoon through early this evening. Damaging wind gusts and large hail are the primary hazards in any thunderstorm.

.DAYS TWO THROUGH SEVEN...Sunday through Friday.

A frontal boundary will become nearly stationary across North Carolina Sunday and Sunday night. Meanwhile, low pressure will track east along the frontal boundary from the Mid-South toward the Carolinas. This will result in periods of locally heavy rain across the region from Sunday through Monday.

.SPOTTER INFORMATION STATEMENT...

Spotter activation may be needed this afternoon...and rainfall reports are welcome through the weekend.

\$\$



# Severe Thunderstorm Definition

**Severe Thunderstorm** - A storm which produces:

- $\geq 1''$  hail - *and / or* -
- $\geq 58$  mph gusts



# Watch

- Conditions are favorable for hazardous weather in and near the watch area
- Issued by the Storm Prediction Center (SPC) in Norman, OK

## Severe Thunderstorm Watch

Valid Until  
10:00 PM EDT Wednesday  
June 5, 2019

### Threat Information



#### HAIL

Scattered Hail Up To  
Lime Size Possible



#### WIND

Scattered Gusts  
Up To 70 MPH Possible



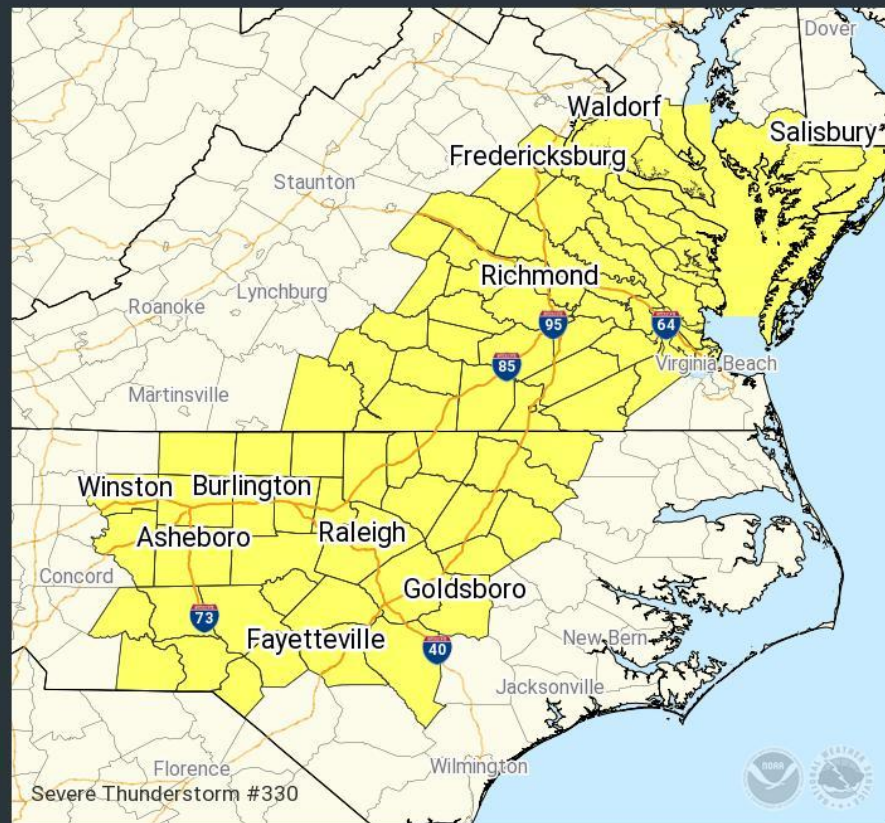
#### LIGHTNING

Frequent Lightning  
Possible

### Potential Exposure



Population: 9,706,612  
Schools: 2083  
Hospitals: 115

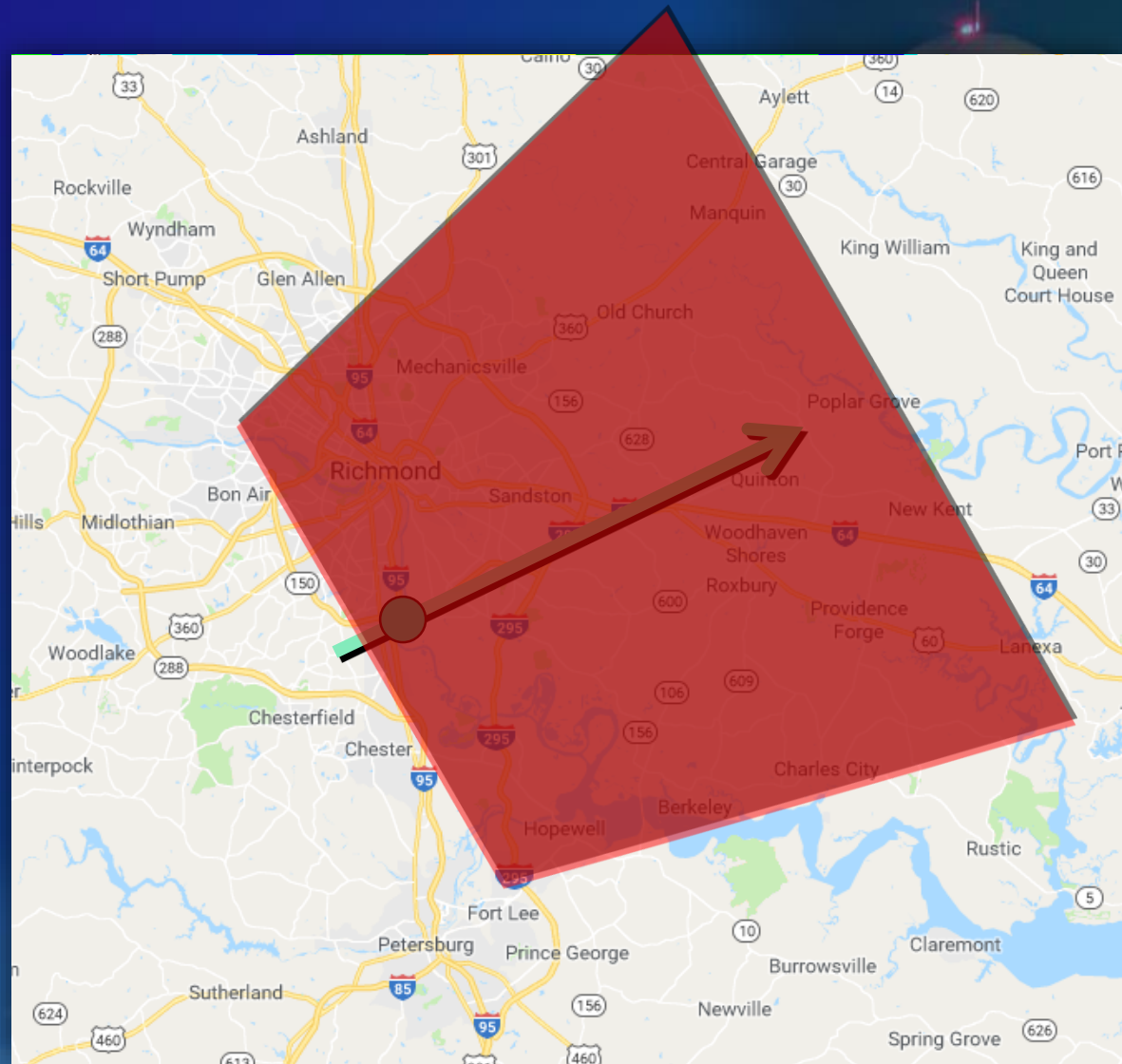




# Warning

- Expected weather event is imminent or occurring
- Warning polygons are based on area of highest threat

**Tornado emergency** may be issued in exceedingly rare instances!



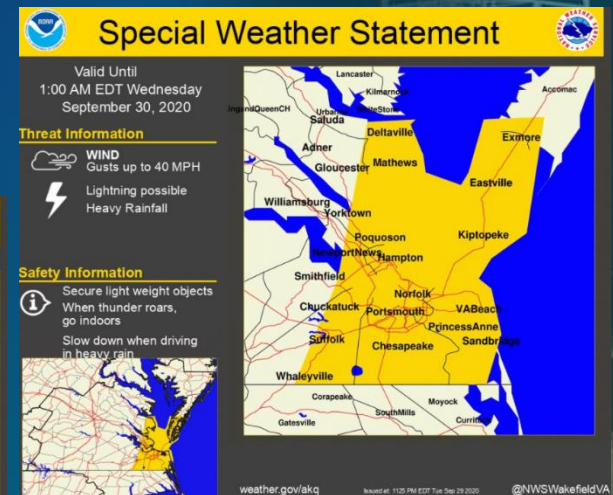
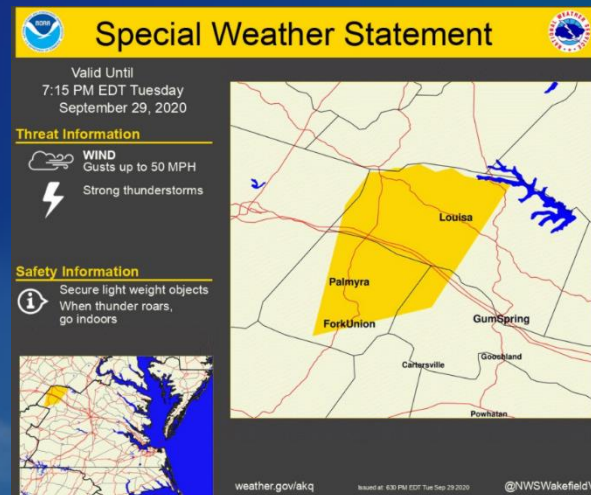


# Special Weather Statement (SPS)

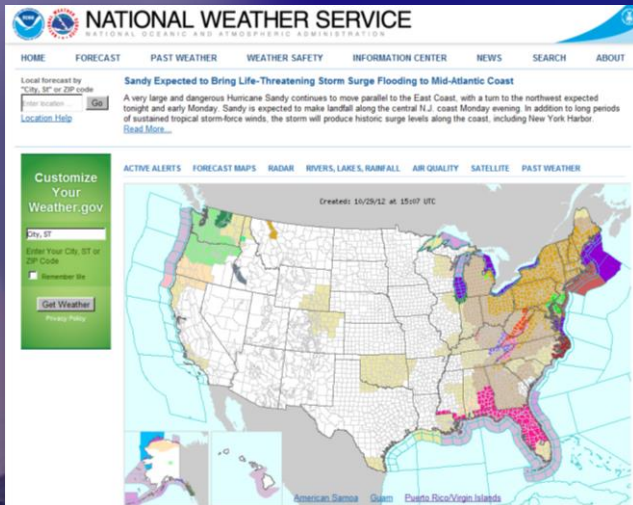
- Issued for strong thunderstorms that may strengthen to severe levels
- Also used for other types of significant weather that do not require a warning (i.e. small hail, wind gusts of 30 to 40 MPH, and/or frequent lightning)

...A LINE OF STRONG THUNDERSTORMS WILL AFFECT THE RICHMOND METRO AREA THROUGH 615 PM EDT...

WIND GUSTS TO 40 MPH AND SMALL HAIL ARE POSSIBLE WITH THESE STORMS. FREQUENT LIGHTNING IS ALSO EXPECTED WITH THIS LINE OF STORMS.



# How do YOU receive Warnings?



How WEA messages look on your phone

- Multiple ways of receiving warnings is ideal!
- Think about how you would receive a warning at...
  - Home (including while you're asleep)?
  - In your car?
  - Sports practice?
  - Work?



# Wireless Emergency Alerts



- Emergency messages sent by authorized government alerting authorities to your mobile device.
- Alerts can be sent to your mobile device without needing to download an app or subscribe to a service.
- Alert Types Include:
  - Extreme weather warnings
  - Local emergencies requiring evacuation or immediate action
  - AMBER Alerts
  - Presidential alerts during a National emergency

<https://www.ready.gov/alerts>

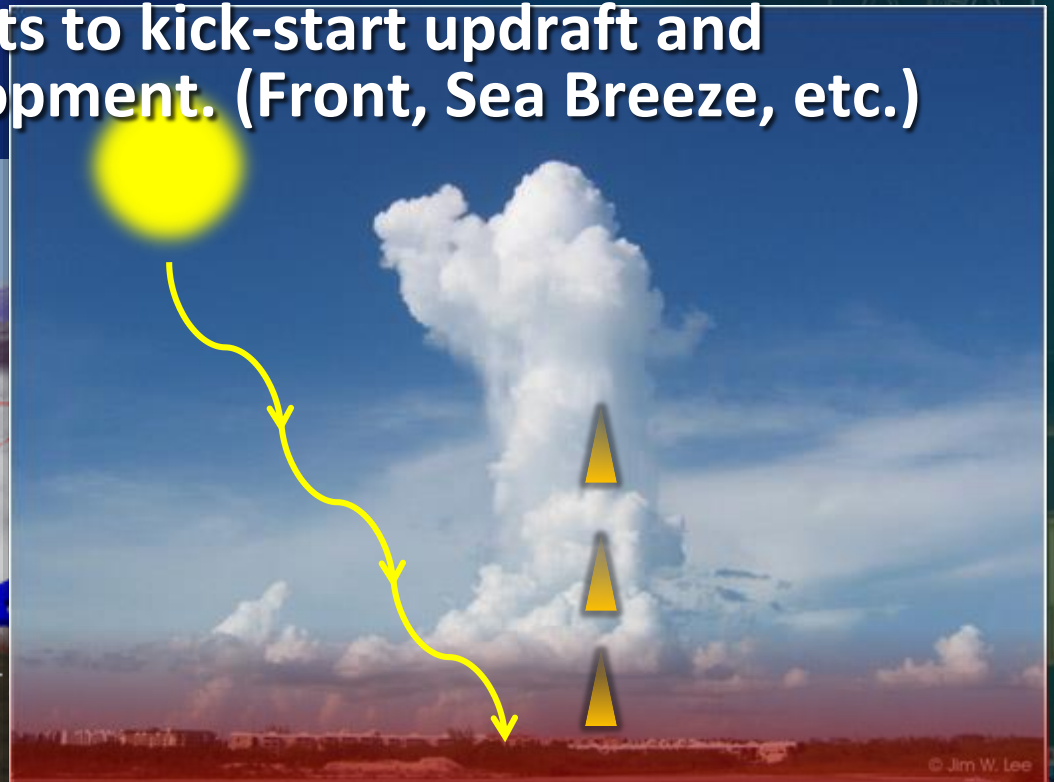
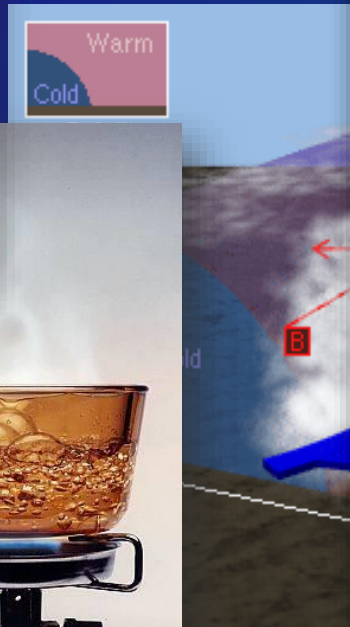


# Thunderstorm Formation

When air is heated, it becomes lighter and **rises**.

If enough **moisture** is present, this **updraft** can develop into a towering cumulus cloud.

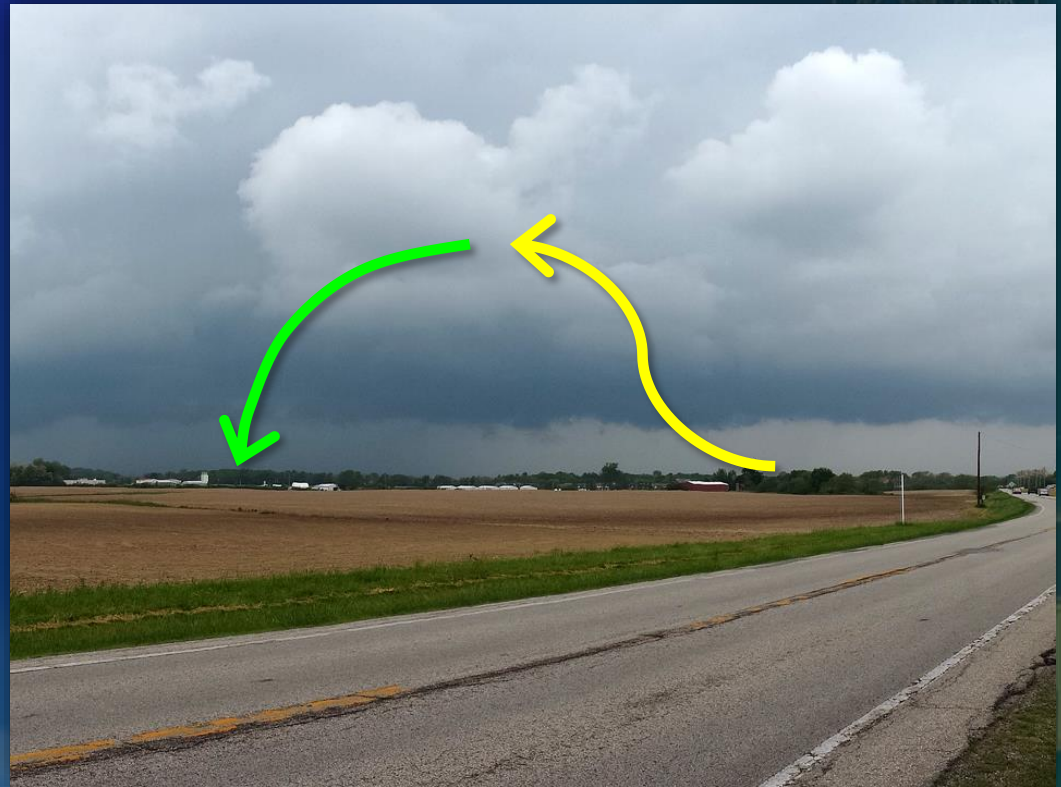
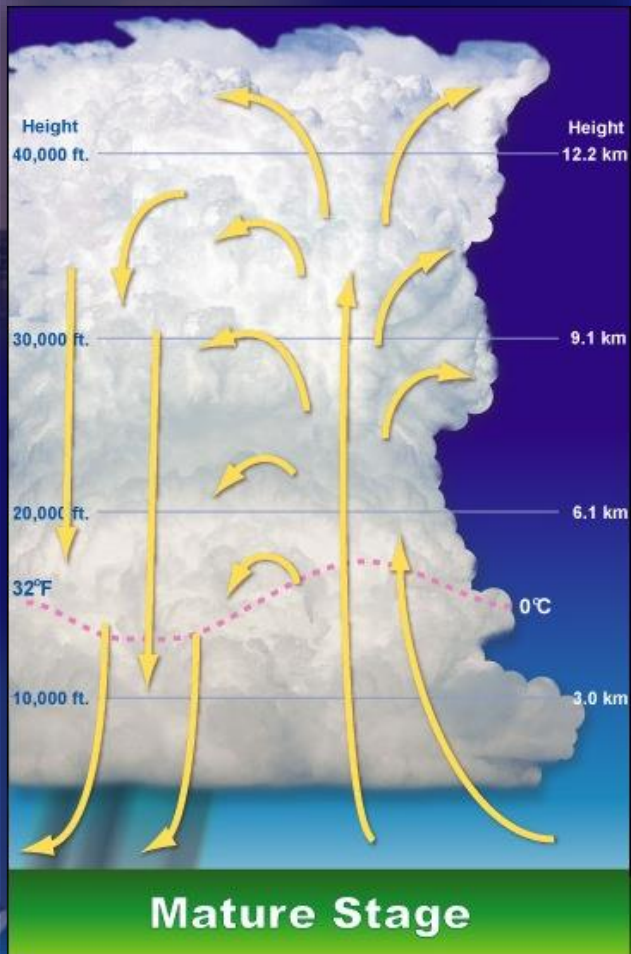
A source of **lift** often acts to kick-start updraft and thunderstorm development. (Front, Sea Breeze, etc.)



© Jim W. Lee

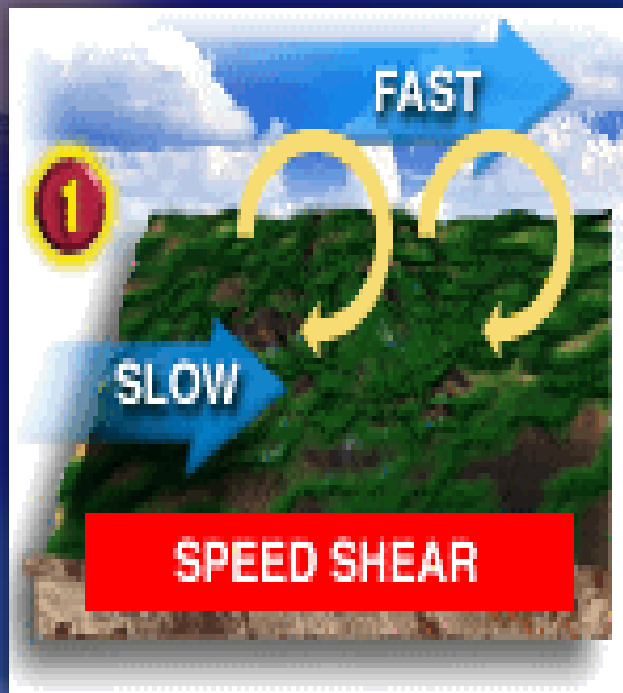
# Mature Thunderstorm

- A fully developed thunderstorm will have a distinct **updraft** and **downdraft**



# Importance of Wind Shear

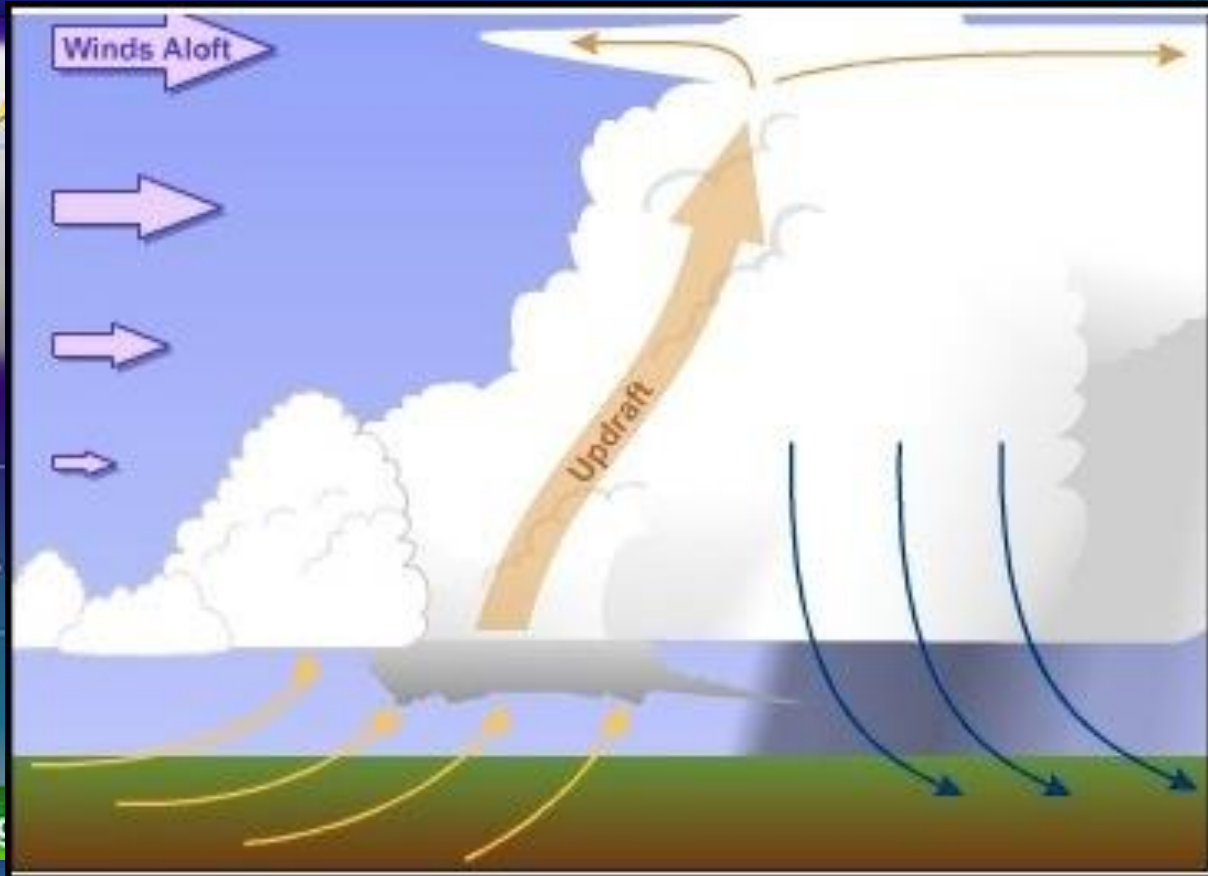
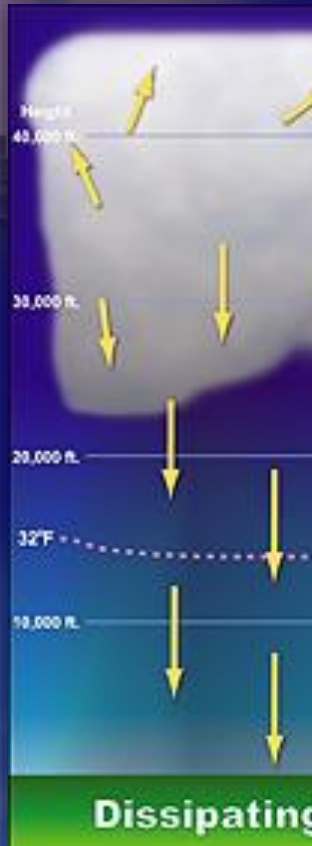
- For a thunderstorm to survive, **wind shear** is needed to keep the updraft and downdraft separate.
- Can be described in terms of speed and direction





# Importance of Wind Shear

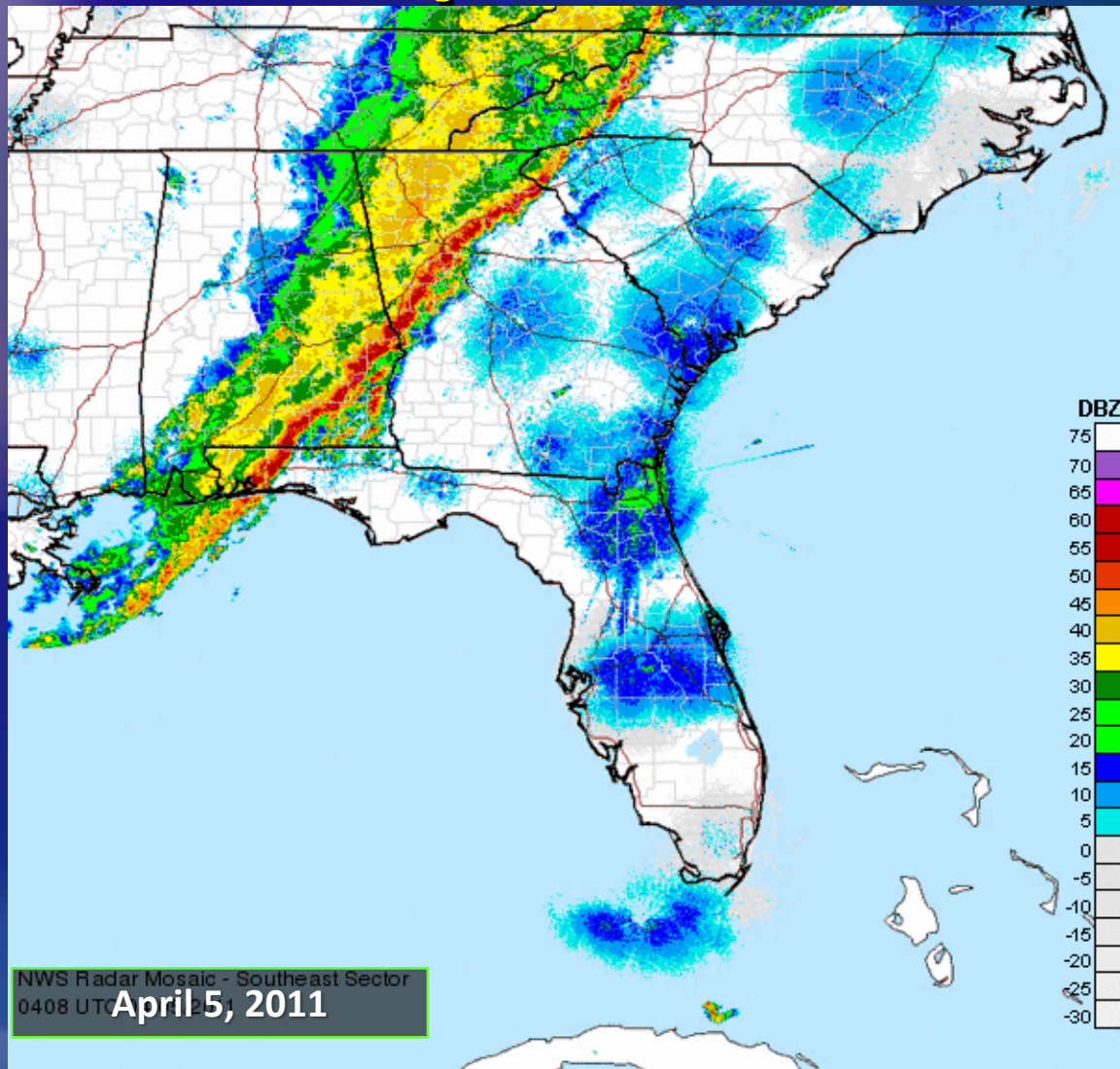
- For a thunderstorm to survive, **wind shear** is needed to keep the updraft and downdraft separate.
- Otherwise the storm collapses on itself and dies!



# Types of Thunderstorms



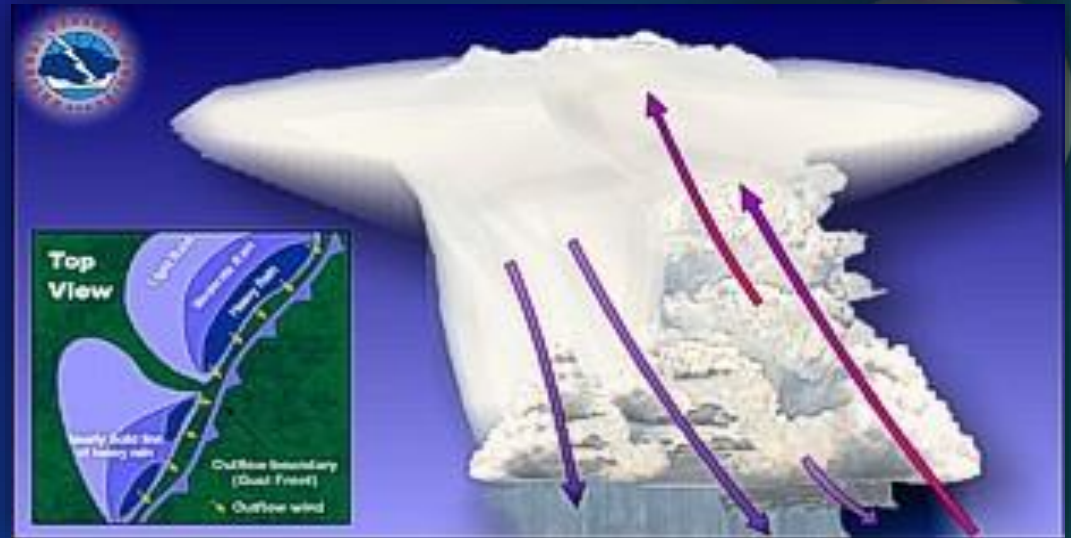
# Squall Line



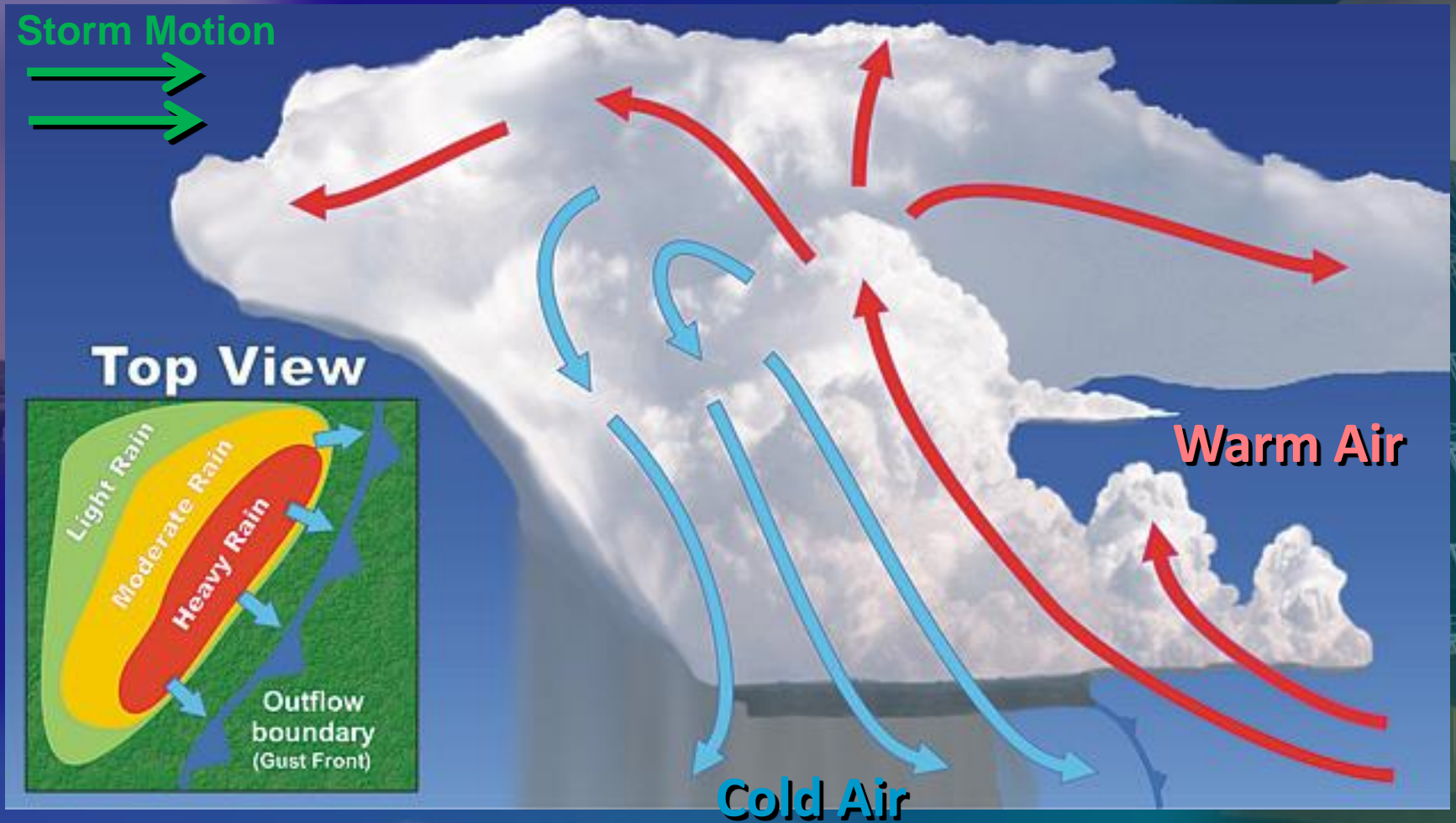


# Squall Line

- Primary threat is damaging winds
- Often accompanied by a shelf cloud



# Shelf Cloud



Strong winds often accompany the passage of a shelf cloud.

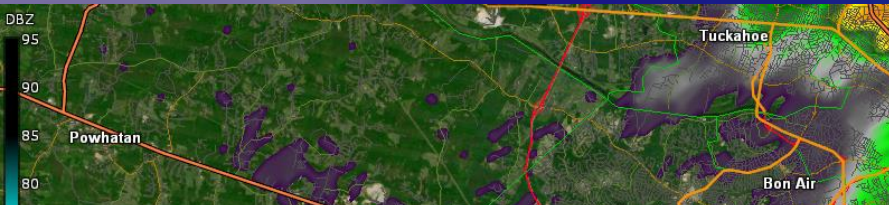
# Squall Line and Gust Front



Shelf cloud forms with strong winds and rain-cooled air following closely behind



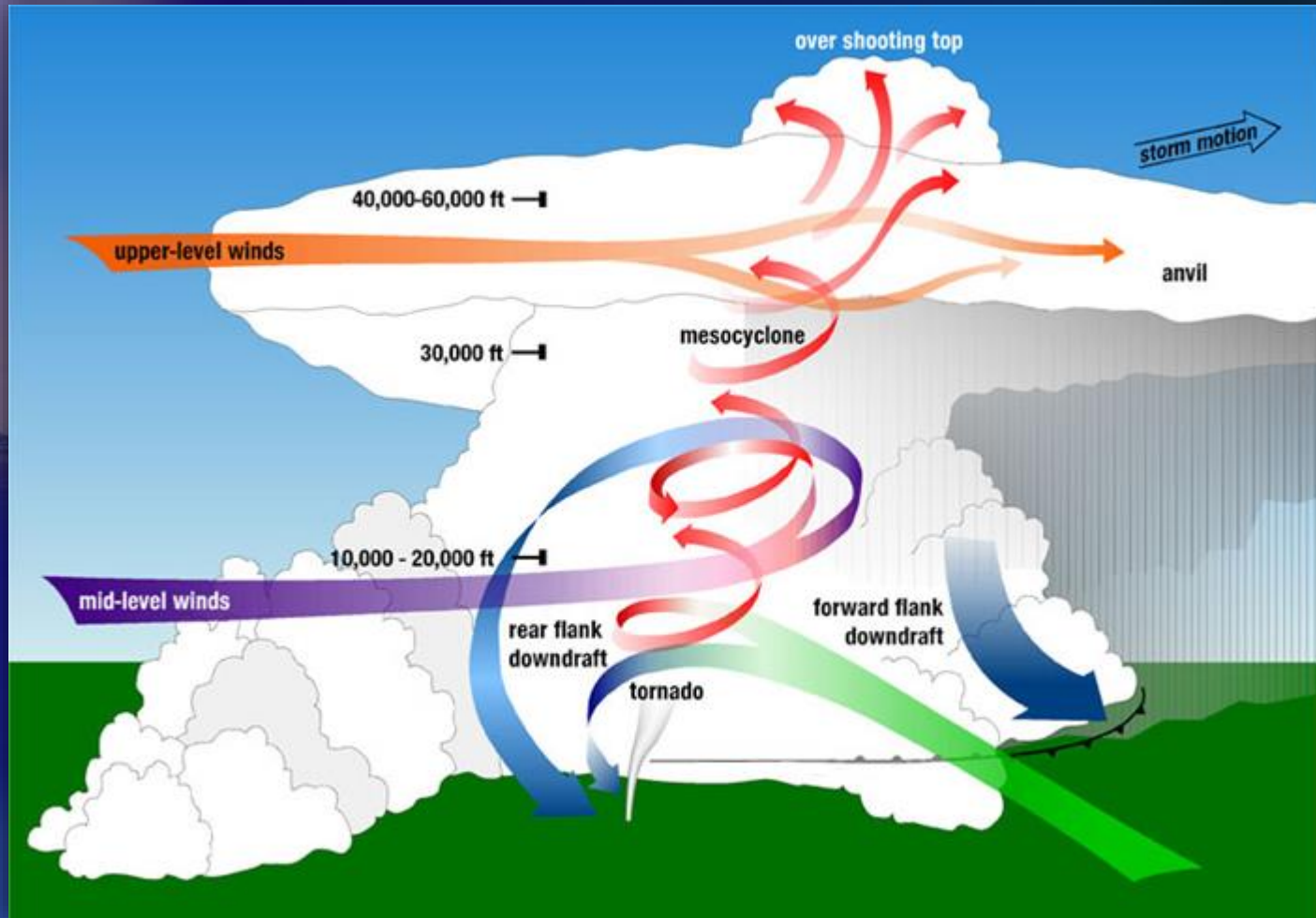
# Supercell Thunderstorms



February 23, 2017

Spring Gr

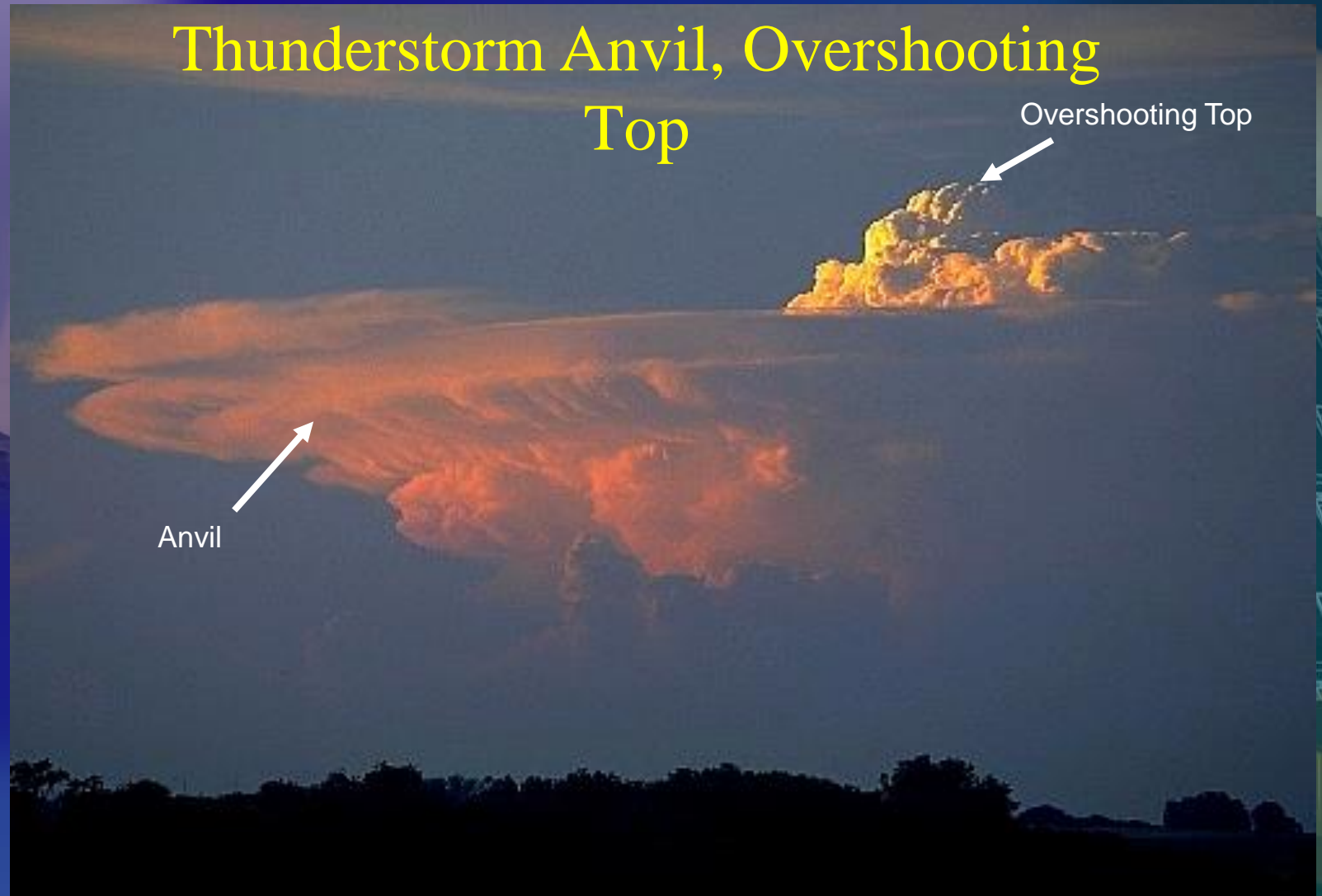
# Supercell Thunderstorms



Supercell thunderstorms are most likely to produce severe weather.

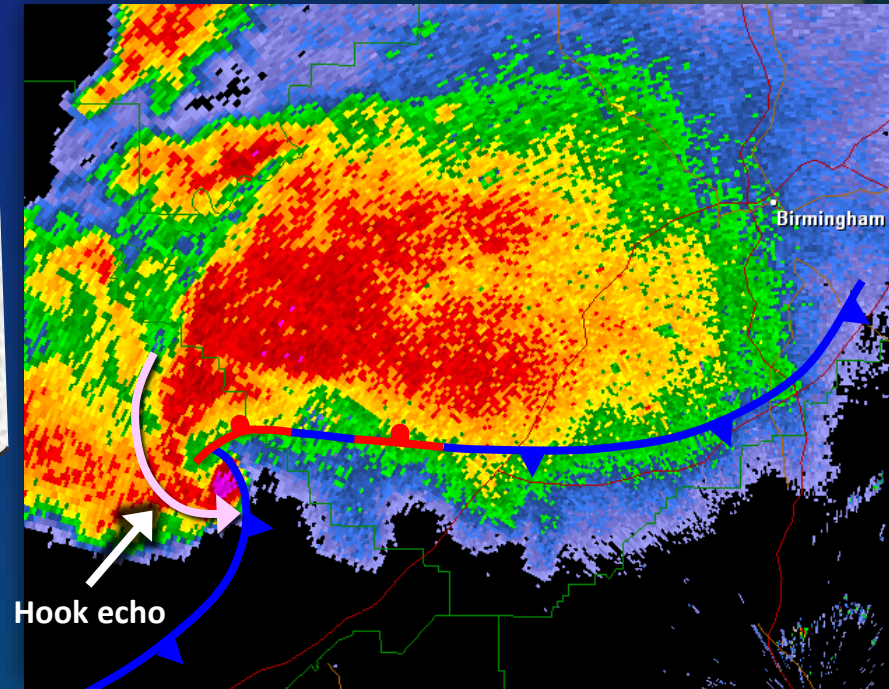
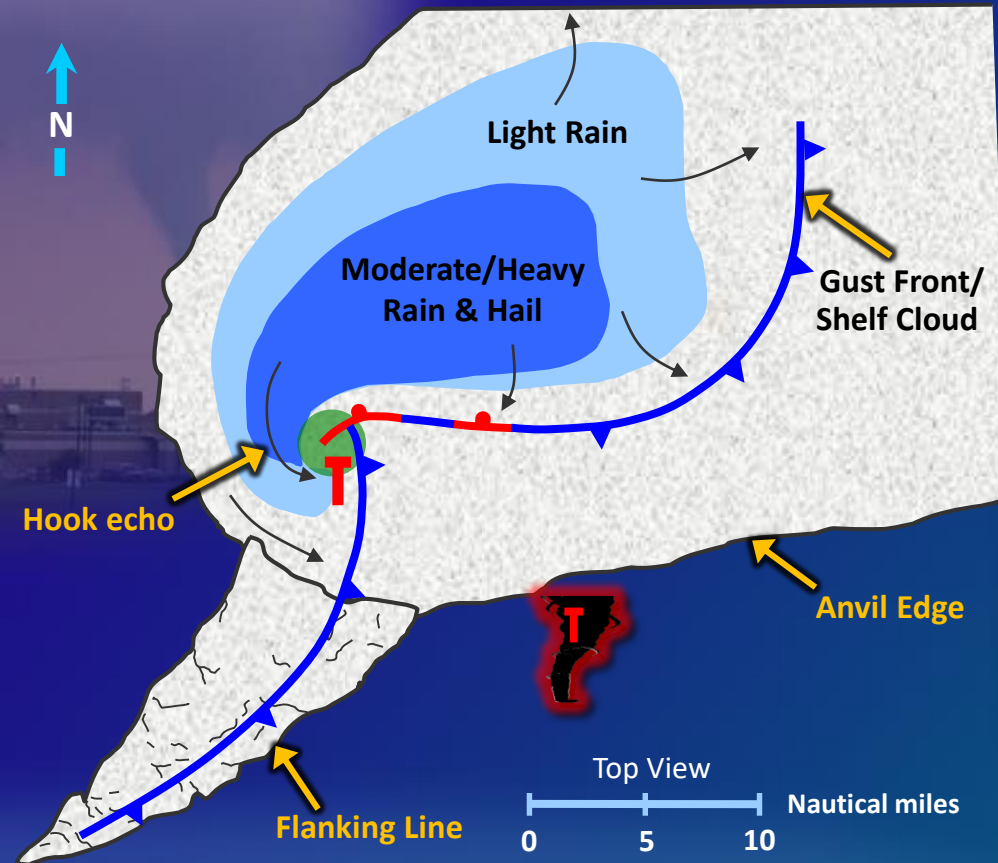


# Thunderstorm Anvil, Overshooting Top





# Classic Supercell Schematic

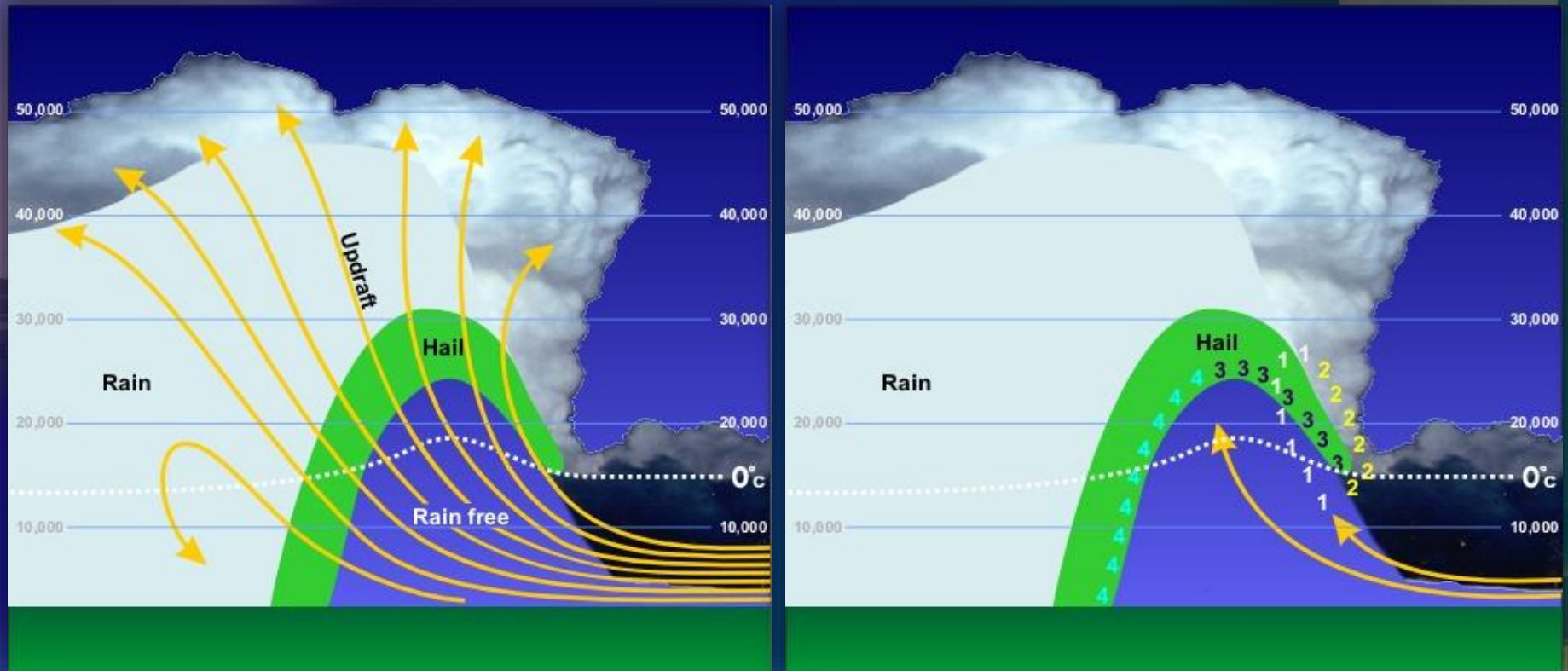


Tuscaloosa/Birmingham, AL Supercell  
April 27, 2011

Tornado usually occurs near the “weak echo region.”

Where in relation to storm is the safest/best place to spot?

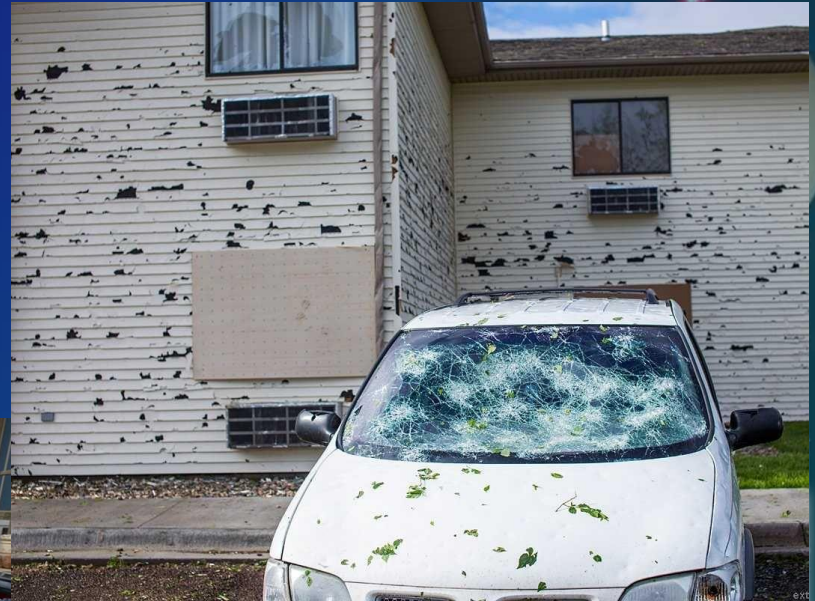
# Hail



Stronger updraft → Bigger hail



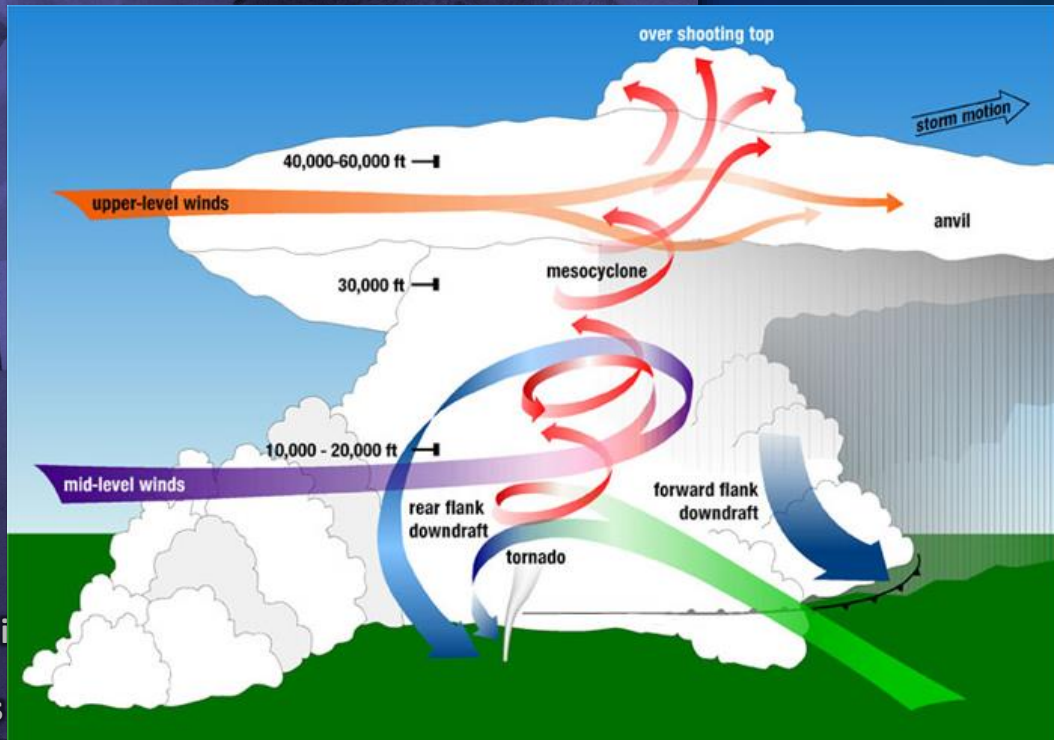
# Dangers of Hail



**Hail can damage vehicles, crops, and structures and can also lead to hazardous driving conditions.**



# Rotating Updrafts Can Produce Very Large Hail!



Diameter: 8.0 inches

Circumference: 18.625 inches

Weight: 1.9375 pounds

Vivian, SD  
July 23, 2010

# Dangers of Hail



**Hail is also dangerous to humans!**



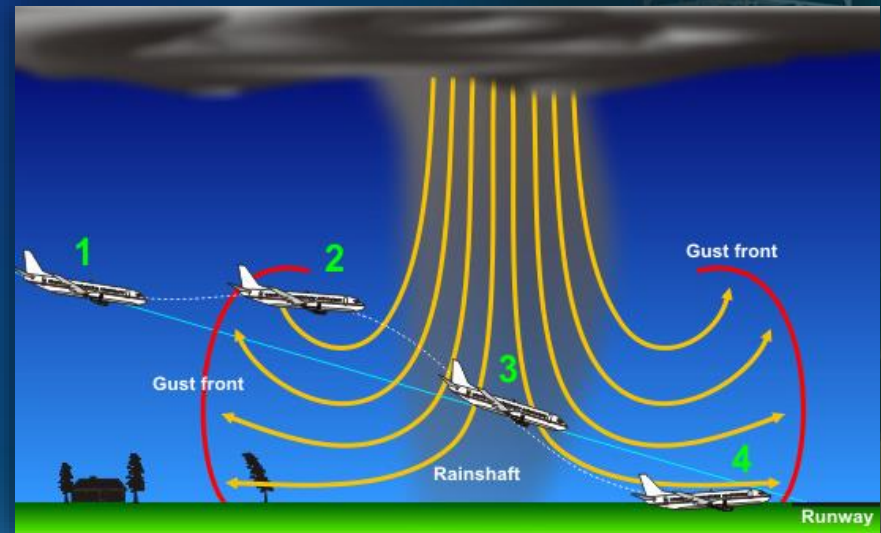
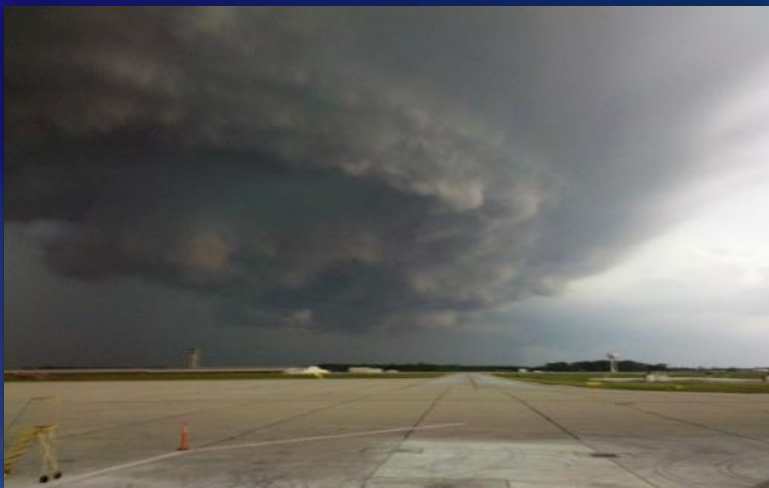
# Damaging Wind





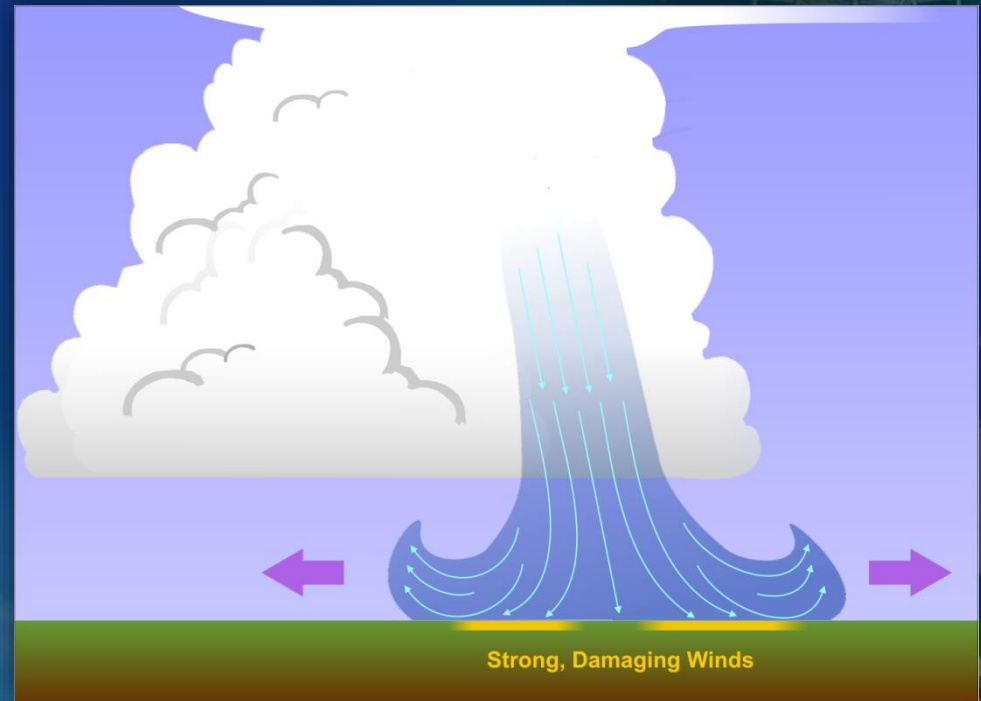
# Straight Line Wind

- Refers to damaging wind not directly associated with tornadic circulation
- Result of the **outflow** from a thunderstorm, due to:
  - Downbursts
  - Squall Lines (gust fronts)



# Downburst (Microburst)

- Area of strong winds produced within downdraft of a thunderstorm
- Typically affect small areas (usually < 5 miles in diameter)
- Can have wind speeds of 50 to 100 MPH



# Downburst



Video courtesy NBC4 SkyCam  
Columbus, Ohio

**The precipitation core (rain and hail) is displaced from the updraft and crashes to the ground.**



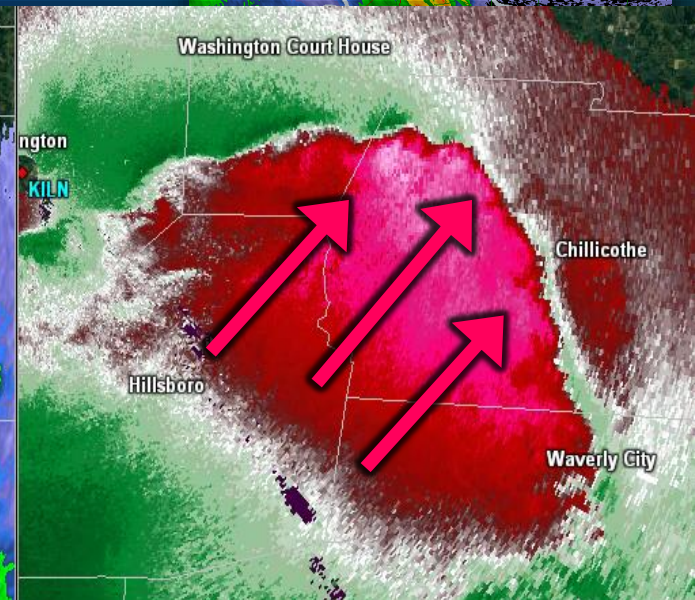
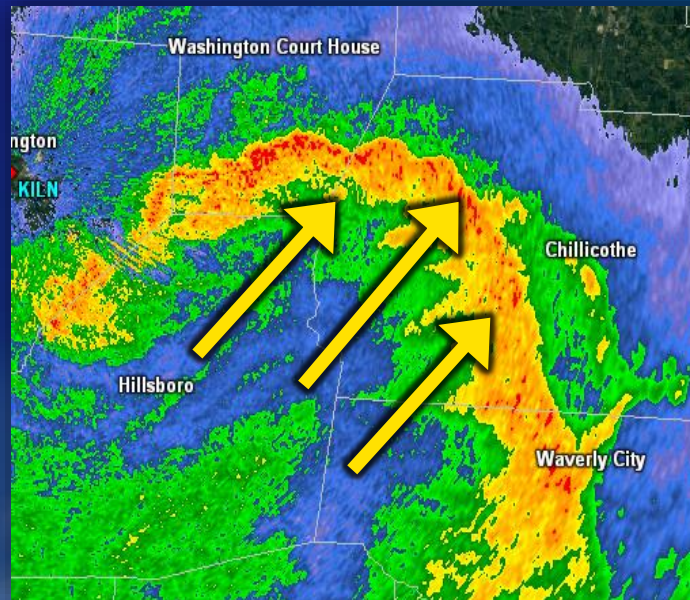
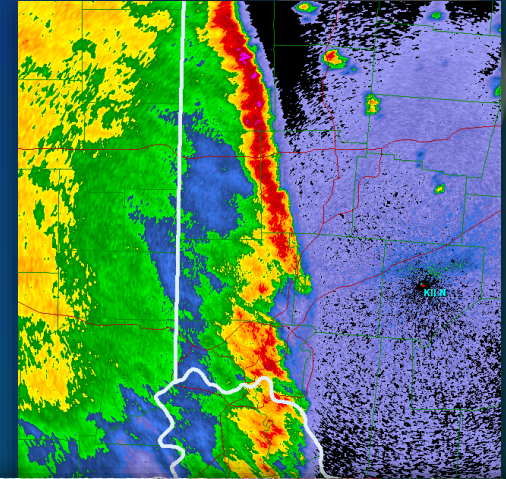
# Downburst Damage



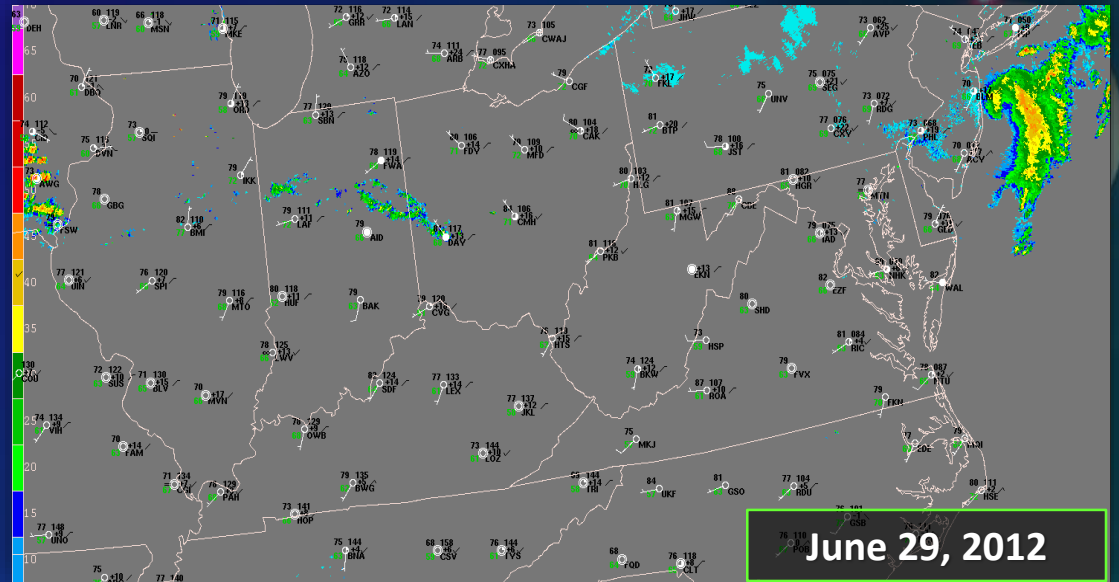
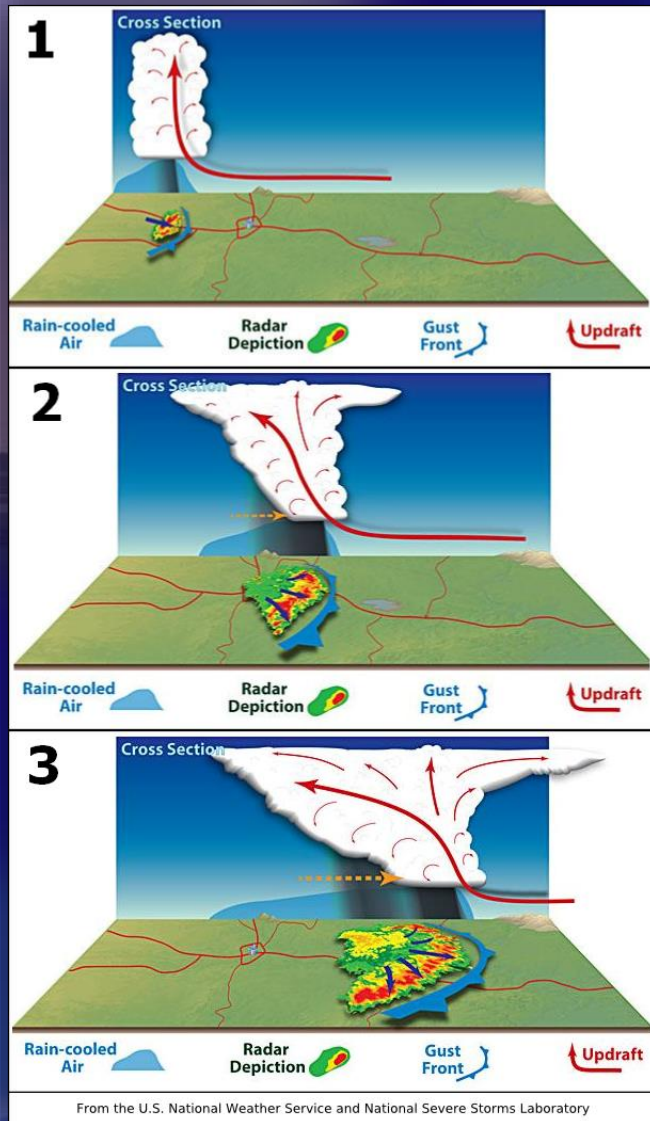


# Squall Line Winds

- Squall lines move quickly and can produce damaging winds over a very large area.
- If gust front advances too far ahead of storms, winds will gradually weaken.
- Bow echo: area of enhanced winds, more significant damage



# Derecho



- Long-lived, organized thunderstorm complex w/a damage swath  $\geq 240$  miles
- Forms in unusually warm, moist air mass
- Widespread wind damage



# Brief Review...

Which of the following is not true of radar?

- A. *Usually can't detect what's happening near the ground*
- B. *Resolution decreases with distance*
- C. *NWS relies solely on radar data when deciding to issue a warning*
- D. *Doppler radar can provide estimate of wind speeds inside thunderstorms*

**ANSWER: C**

*(That's why we're all here today!)*



# Flash Flooding

- The most severe and dangerous type of flooding!
  - **Rapid rise** of water onto dry areas
  - Rushing water over roads, impacting travel
  - Water entering main levels of homes and businesses
  - Dam breaks



# Flash Flooding

- In very rare cases, the NWS can issue a Flash Flood Emergency
- This would only be used in situations with an extremely high risk to life and property.



Ellicott City, MD  
May 2018

On Sunday May 27, 2018, A series of thunderstorms produced over 9" of rain in 2 hours over northeast MD!



# FLOOD WARNING

A Flood Warning is issued when flooding is **happening** or will happen soon. Some roads will be **flooded**.

**Move** to higher ground.

**Never drive** through flooded roads.

**take action.**

# FLOOD WATCH

A Flood Watch is issued when flooding is possible.

Stay tuned to radio/TV, follow **weather.gov** and be ready to seek higher ground.

Learn more at **weather.gov/flood**.

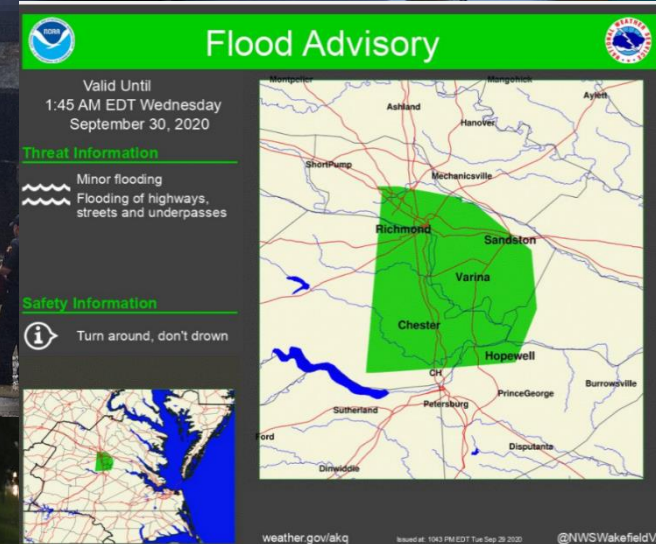
**be prepared.**





# Urban/Small Stream Flooding

- May require **Flood Advisory**
  - ***Standing water on road / streams out of banks***
  - ***'Typical' flooding of underpasses or flood-prone areas***
- Not usually life-threatening



# 3 SIMPLE STEPS FOR FLASH FLOOD SAFETY

During a flood, water levels and the rate at which the water is flowing can quickly change. Remain aware and monitor local radio and television.



[weather.gov/flood](https://www.weather.gov/flood)

- 1 GET TO HIGHER GROUND**  
Get out of the areas subject to Flooding
- 2 DO NOT DRIVE INTO WATER**  
Do NOT drive or walk into flooded areas. It only takes 6" of water to knock you off your feet.
- 3 STAY INFORMED**  
Monitor local radar, television, weather radio, internet or social media for updates.



TORNADO

HAIL

LIGHTNING

WIND

FLOODING

# Thunderstorm-Related Hazards / Safety



## *Understanding* **SEVERE WEATHER HAZARDS**

**ACTION**  
Take shelter  
immediately in a  
sturdy structure

**ACTION**  
Move indoors away  
from windows

**ACTION**  
Move indoors if  
you hear thunder




**ACTION**  
Move indoors away  
from windows

**ACTION**  
Avoid rising  
creeks and water-  
covered roads

James Hobbs







# 10 Minute Break

# Enhanced Fujita Scale

Rating	Winds	Damage	Examples	
<b>EF0</b>	<b>Up to 85 mph</b>	<b>Minor</b>		
<b>EF1</b>	<b>86-110 mph</b>	<b>Moderate</b>		
<b>EF2</b>	<b>111-135 mph</b>	<b>Considerable</b>		



# Enhanced Fujita Scale

Rating	Winds	Damage	Examples	
<b>EF3</b>	<b>136-165 mph</b>	<b>Severe</b>		
<b>EF4</b>	<b>166-200 mph</b>	<b>Extreme</b>		
<b>EF5</b>	<b>&gt; 200 mph</b>	<b>Incredible</b>		

# What Is A Wall Cloud?

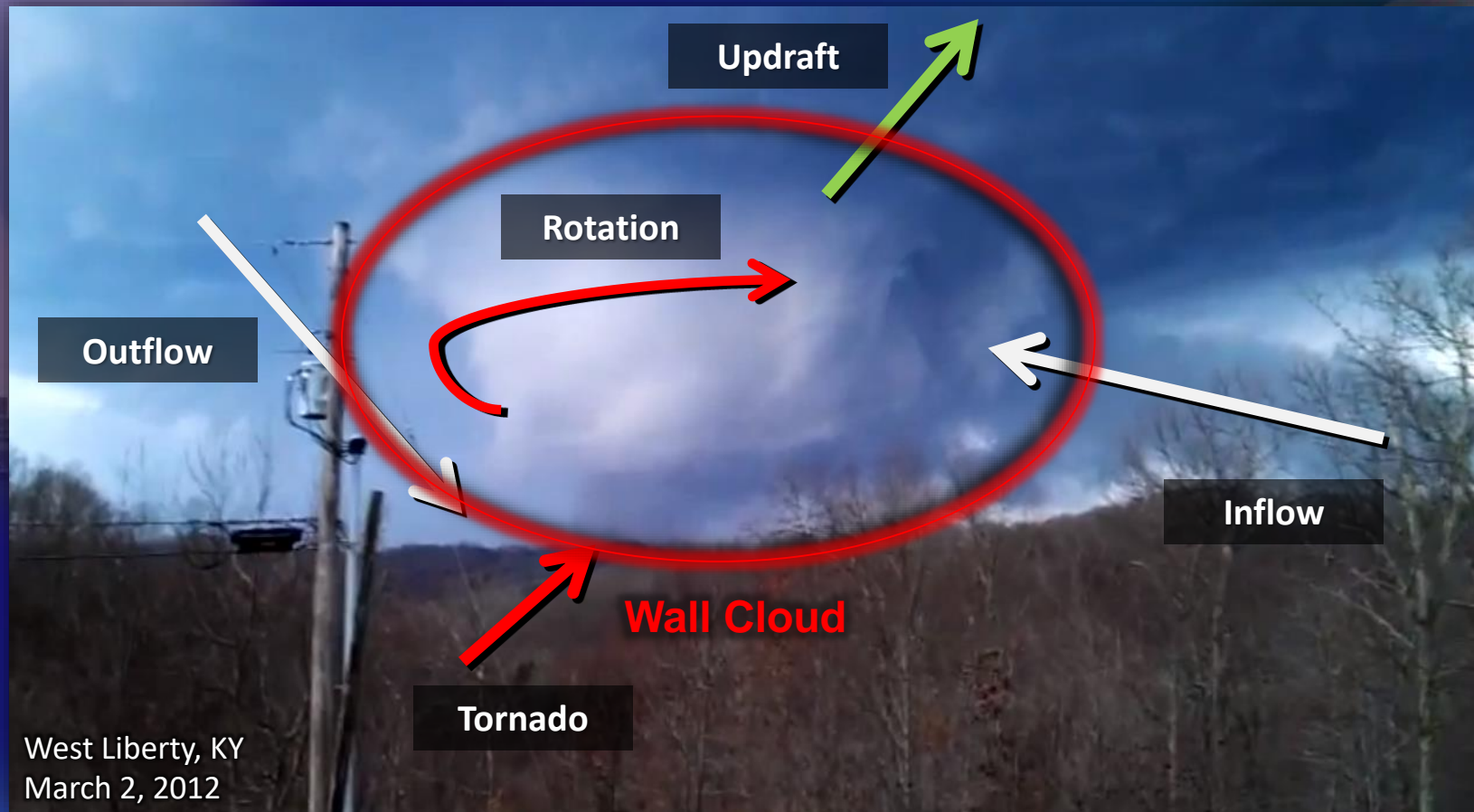


Josh Weitzel  
Palestine, OH  
August 2009

- Isolated lowering of cloud base, usually at base of updraft
- Updraft ingests rain-cooled air, which condenses into cloud *pointing toward rain*
- **Rotating** wall cloud implies a rotating updraft
- Updraft + rotation = ***watch for tornado!***



# Wall Cloud / Supercell Diagram



The wall cloud is the base of the updraft.  
If the wall cloud is rotating, so is the updraft!

# Wall Cloud / Supercell Diagram



The wall cloud is the base of the updraft.  
If the wall cloud is rotating, so is the updraft!



# Keys to Spotting Wall Clouds

- #1) Sustained Upward Motion

- #2) -----

- Is the feature persistent?
- Is it attached to the storm base?



# Keys to Spotting Wall Clouds

- **#1) Sustained Upward Motion**
- **#2) Vertical Axis of Rotation**





# Shelf Clouds vs. Wall Clouds

## Shelf Clouds...

Slope **away from** precipitation

Indicate downdraft/outflow



## Wall Clouds...

Slope **toward** precipitation

Indicate updraft/inflow



# Funnel Cloud

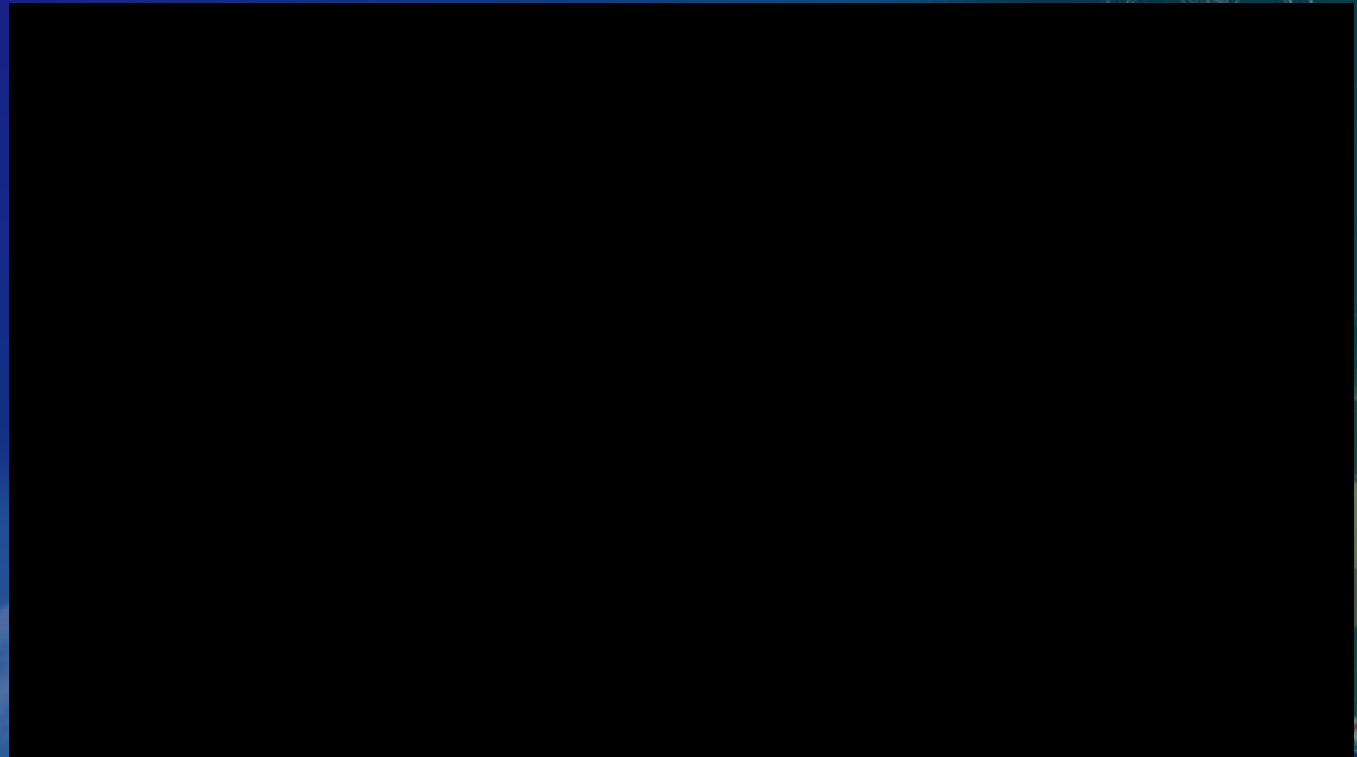
- Rotating funnel-shaped cloud extending downward from thunderstorm base (often from wall cloud)
- Always attached to cloud base
- Does *not* reach the ground
- Exhibits rapid rotation and may be **laminar** or **smooth** in appearance (Striations)





# Tornado

- **Rapidly rotating** column of air in contact with **cloud base** and **ground**
- Not all have visible funnel clouds; *look for dirt/debris swirling near ground*
- Always exhibit rapid rotation if spotted from up close



# Spotting Tornadoes

- Smoothed funnel appearance implies rotation
- Laminar feature is likely a funnel cloud or tornado
- Some tornadoes are extremely skinny or “rope” like





# Spotting Tornadoes

- Some funnel clouds and tornadoes are more ragged
- Always look for vertical motion and rotation!



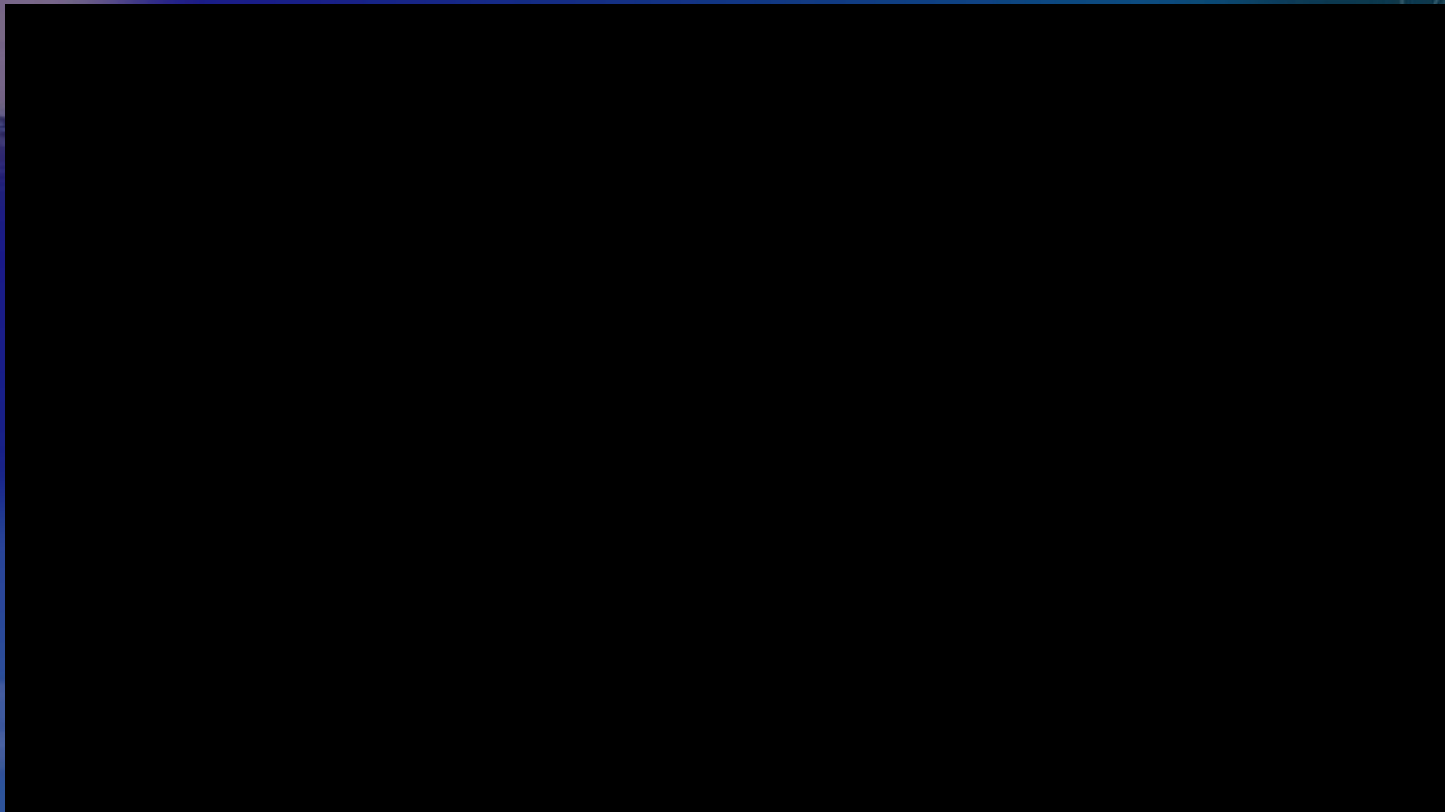
# Spotting Tornadoes

If a ragged cloud does not exhibit **rotation** and **upward motion**, it is not a funnel cloud or tornado!



# Spotting Tornadoes

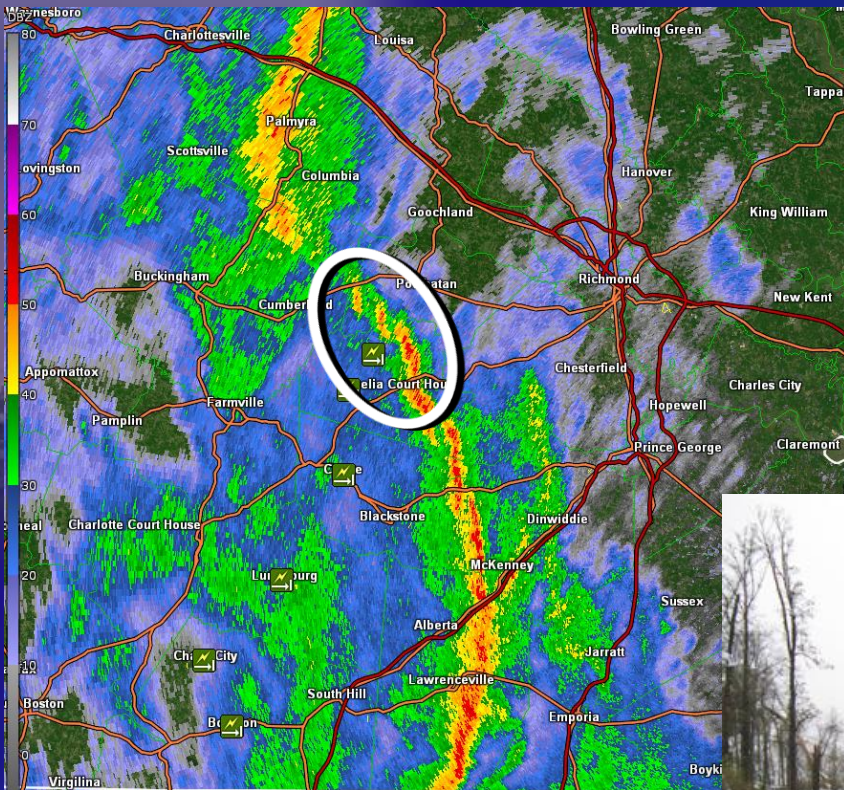
- **Rapid rotation** and **rapid upward motion** originating from the ground indicates a tornado!
- If rotation can't be detected, look for rapid changes in shape.



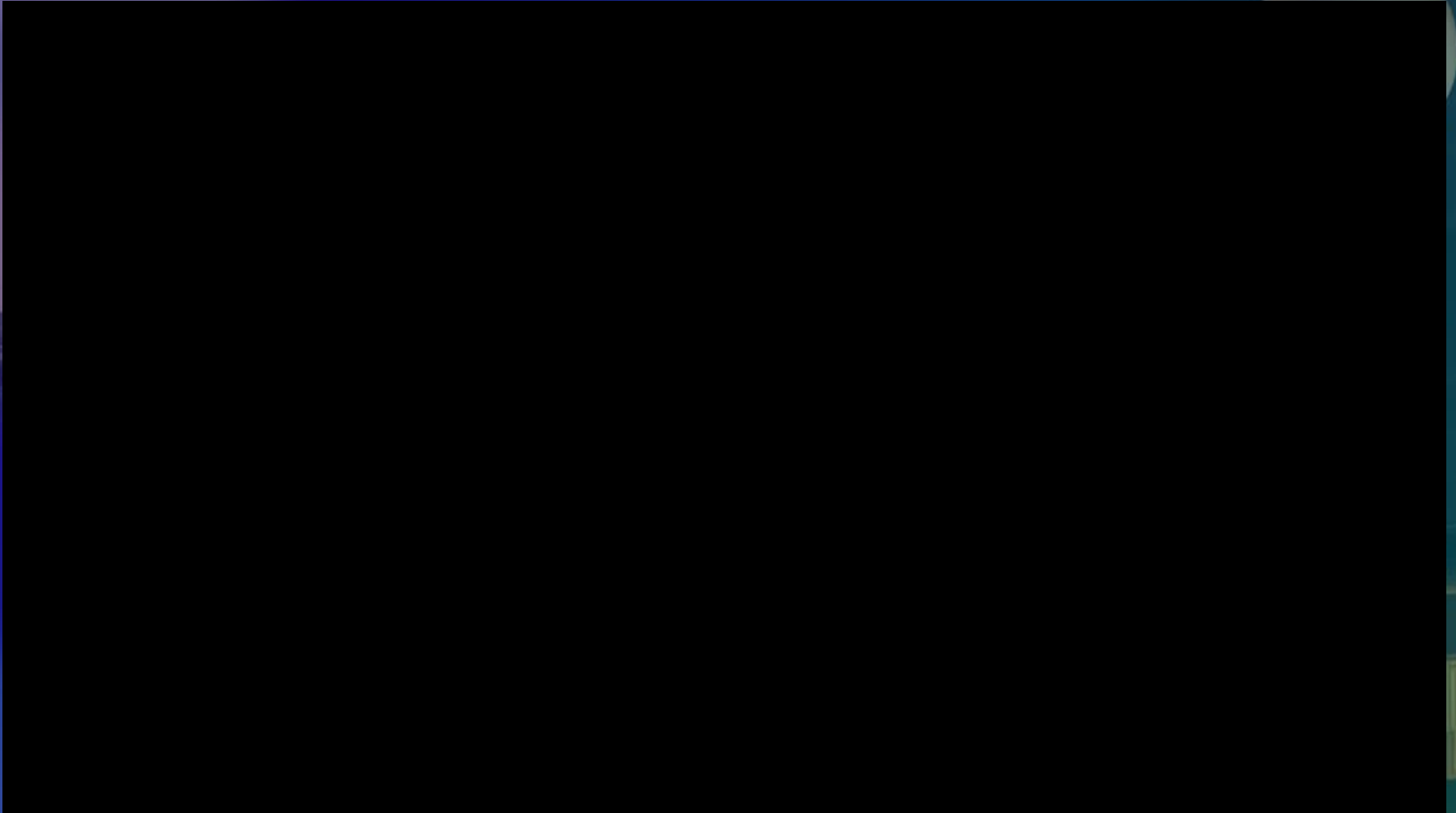


# Squall Lines and Tornadoes

- Squall line tornadoes are usually weak and short-lived, but in rare cases can be EF2-EF3.
- These tornadoes move very quickly, and are frequently rain-wrapped. Because of this, they are **virtually impossible to spot**.



# Rain-Wrapped Tornadoes



# Uncertainties When Spotting

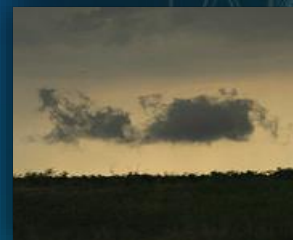
*What do you do when it's not clear cut?*



Report it!



??



Do not report it!

**REPORT IT ANYWAY!**

*Better safe than sorry!*



# Reporting In Uncertain Situations

- Report what you see. Give specific details!
- Do not make assumptions!



~~*"I see a funnel cloud."*~~

*"I see a POSSIBLE funnel cloud because..."*

- *Appendage attached to storm base*
- *Has lasted past 5 minutes*
- *Too far away to see movement or rotation*

# NWS Wakefield Operations





# NWS Wakefield Operations



**Yes, we will offer  
tours!**

**Check out the local  
programs tab at  
[weather.gov/Wakefield](http://weather.gov/Wakefield)  
for more information!**

**Check our Youtube  
Channel!**

- Normally staffed by 2 to 4 meteorologists***
- Can increase to more than 10 during severe weather***
- We may only have a few people answering phones,  
so time may be of the essence!***



# How to Report – Logistics

- Start with the basics...

- *Identify yourself as a spotter (no ID to memorize!)*
- *Your exact location*
  - ✓ 5 miles west of City A
  - ✓ Near intersection of Route X and Road Y
  - ✓ Latitude and longitude coordinates appreciated but not required
  - ✓ If observing a cloud feature, in what direction are you looking?
- *Exact time of event*
  - ✓ If ongoing or lengthy, provide start/end time
- *The weather event...*

# What to Report

- Hail (including size)
- Thunderstorm wind damage to trees, structures or measured wind gusts 40 mph or higher
- Tornadoes and/or waterspouts
- Flooding (roads impassable, hazardous; streams, creeks out of banks)
- Funnel clouds or wall clouds
- Storm damage from any of the above or from lightning
- Weather related injuries
- **Do not report lightning!**

*If you report something significant, we'll want your contact info.*

# What to Report - Hail



## How to Report Hail Size



**Don't Compare Hail to Marbles!**  
*Why? Not all Marbles are Alike in Size!*



**Measure Hail With Common Objects**



**Good Examples of Comparison**



Object	Size	Object	Size
Dime/Penny	0.75 inches	Hen Egg	2.00 inches
Nickel	0.88 inches	Tennis Ball	2.50 inches
Quarter	1.00 inches	Baseball	2.75 inches
Half Dollar	1.25 inches	Tea Cup	3.00 inches
Ping Pong Ball	1.50 inches	Grapefruit	4.00 inches
Golf Ball	1.75 inches	Softball	4.50 inches

**Report largest stone size**





# What to Report - Wind

- Wind speed estimates can be difficult and are prone to error.
- Severe wind or Power Lines Down = damage!
- **Measured** wind speeds provide the most accurate information.
- Determining what kind of winds caused the damage can be tough!
- **Just report the type(s) of wind damage that you observe.**



# Reporting Wind Speed

Calm	Smoke rises vertically.
1-3 MPH	Wind motion visible in smoke.
4-7 MPH	Felt on skin. Leaves rustle.
8-12 MPH	Leaves/flags in constant motion.
13-18 MPH	Dust is raised. Small branches move.
19-24 MPH	Small trees sway.
25-31 MPH	Large branches move. Whistling heard in wires.
32-38 MPH	Trees in motion. Some difficulty walking.
39-46 MPH	Twigs broken. Cars veer on road.
47-54 MPH	Light structural damage - shingles blown off roof.
55-63 MPH	Tree damage possible. Light structural damage.
64-73 MPH	Tree and structural damage.
74-95 MPH	Considerable/widespread tree and structural damage.

**Reporting wind speeds  
can be tricky!**

**Use these physical clues  
to help you determine  
wind speed.**

***Report!***

**Time Of Event  
Location  
Speed  
Duration**

# Methods for Reporting

★ **Phone – 757-899-2415**

Severe Weather Reports Only

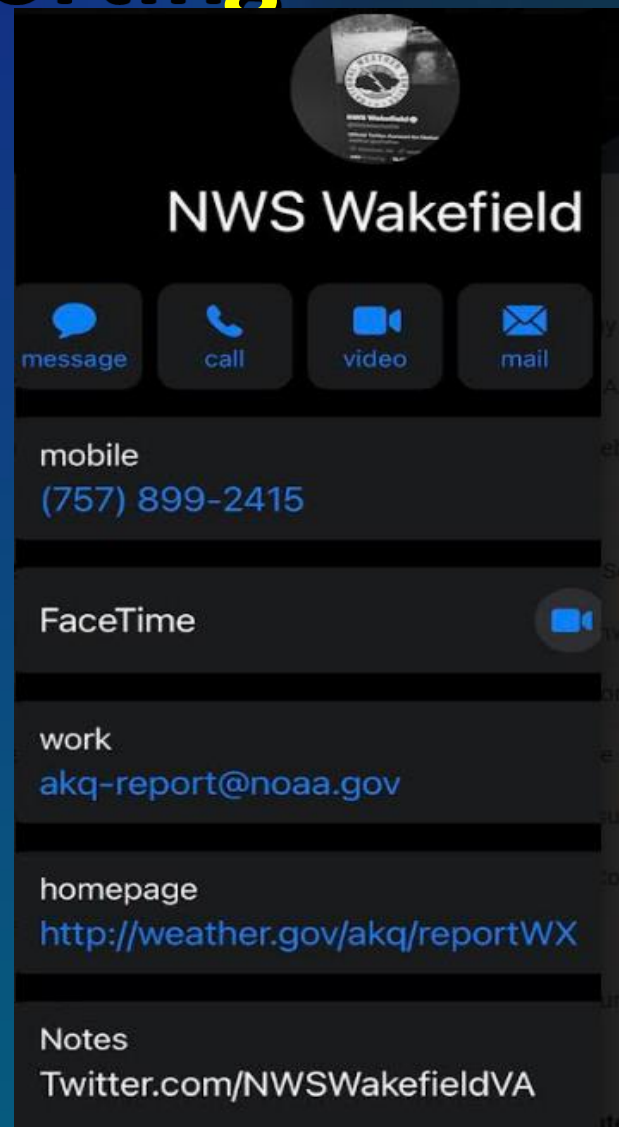
★ **Amateur Radio**



**/NWSWakefieldVA**

• **Email – [akq-report@noaa.gov](mailto:akq-report@noaa.gov)**

- Use social media/email for pictures of damage, cloud features!





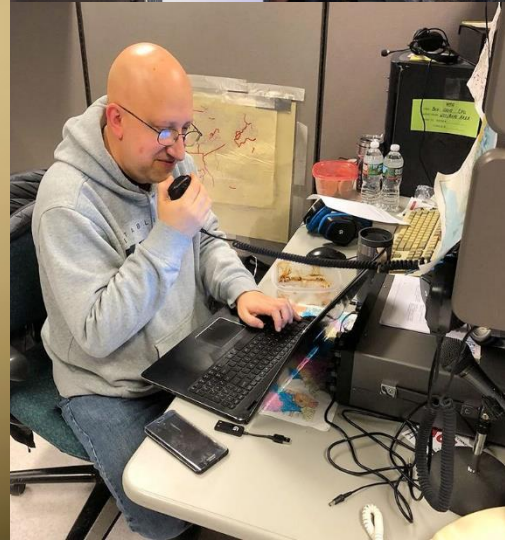
# We Need To Hear From You!

- We don't often "cold call" spotters for reports!
  - *Issuing warnings takes precedence*
  - *Don't know your exact location at time of storm*



**Spotters + NWS = saved lives!**

# Amateur Radio



<http://www.wx4akq.org/>

- One-stop shop for all things SKYWARN & Amateur Radio
- Net Control frequencies and contact points
- Details on local training and policy
- Training Resources

**SKYWARN** desk at NWS Wakefield, Virginia



# A Picture's Worth a Thousand Words!



Maria Jaws  
Virginia Beach, VA

***Be sure to identify  
yourself as a trained  
spotter when posting  
on social media!***

Photos and video can be sent to us  
via email: [akq-report@noaa.gov](mailto:akq-report@noaa.gov)

...or submitted to...



Kyle Greer  
Hampton, VA



Jeff Burley  
Chesterfield, VA



# Spotter Safety

- There is **no magical bubble** that protects your location.
- **Never** put yourself or anyone else in harm's way!
- Always know your position with regard to the storm.
- Do not try to spot at night.

# Spotter Safety

- We do not recommend chasing.
- Seek shelter in a **sturdy building** away from windows.
- A basement provides the best protection.
- If a basement is not available, go to a small interior room on a building's lowest level.

# TORNADOES AND ROAD SAFETY

## WHAT TO DO

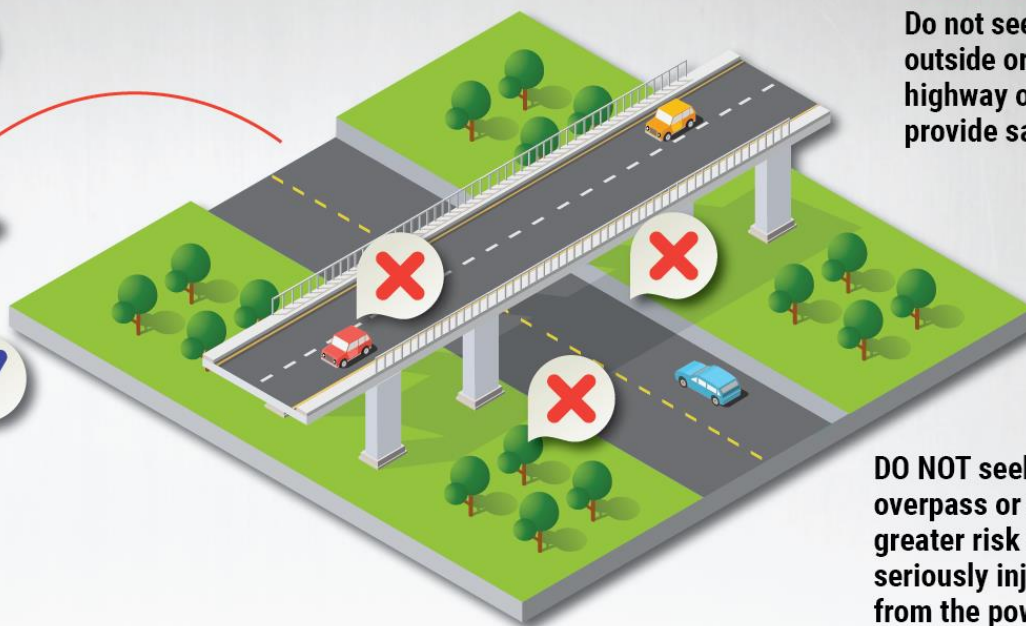
Get off the road. The best option is to drive to a designated shelter, basement or safe room.



The next best option is a small, window-less room or hallway on the lowest floor of a sturdy building.



OR



## WHAT NOT TO DO

Do not seek refuge in a vehicle, outside or under an overpass. A highway overpass does not provide safety from a tornado.

**DO NOT** seek shelter under an overpass or a tree. This puts you at greater risk of being killed or seriously injured by flying debris from the powerful tornadic winds.





# Lightning

## Do's and Don'ts

### Do

Go Inside When You Hear Thunder or See Lightning!

Find a Sturdy House, Building, Car With A Hard-Top Roof

Stay Indoors For at Least 30 Minutes After You Last Hear Thunder



[weather.gov/lightning](https://weather.gov/lightning)

### Don't

Retreat to Dugouts, Sheds, Pavilions, Picnic Shelters or Other Small Structures

Use or Touch Electronics, Outlets, or Corded Phones

Go Under or Near Tall Trees, Swim or Be Near Water, Be Near Metal Objects or Windows



## Camping Safety

PREPARING FOR WEATHER

**KNOW YOUR WEATHER FORECAST**

**NOTIFY FAMILY/FRIENDS OF YOUR PLANS**

**HAVE AN EVACUATION PLAN, KNOW WHERE AND HOW FAST YOU CAN FIND SHELTER**

**PACK A SAFETY KIT AND WEATHER RADIO**



[weather.gov/lightning](https://weather.gov/lightning)

# Lightning Safety



# Brief Review...

How should this be reported?

- A. Tornado*
- B. Straight-line winds*
- C. Estimated 70 mph winds*
- D. A few trees snapped*
- E. Doesn't need to be reported*



**ANSWER: D**

*(Just report what kind of damage you observe!)*



# SPOTTER QUIZ!

Examples for  
Spotter Identification

# Flash Flooding



# Small Hail...



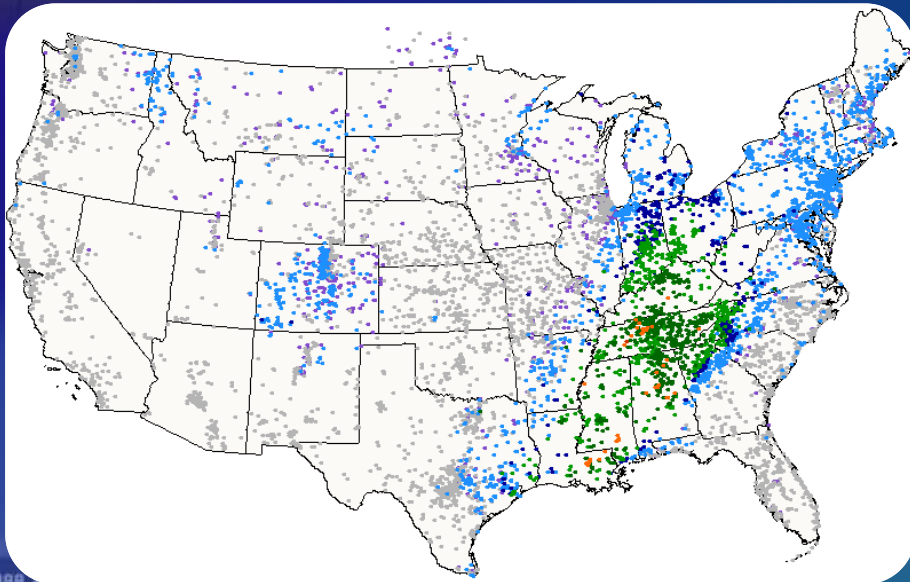
*If so...as what?*



# CoCoRaHS

(Community Collaborative Rain, Hail, and Snow Network)

- Rain, snow, and hail reports easily entered on the internet
- Data used both real time in warning events and afterwards to help improve forecasts and verification, and for research purposes

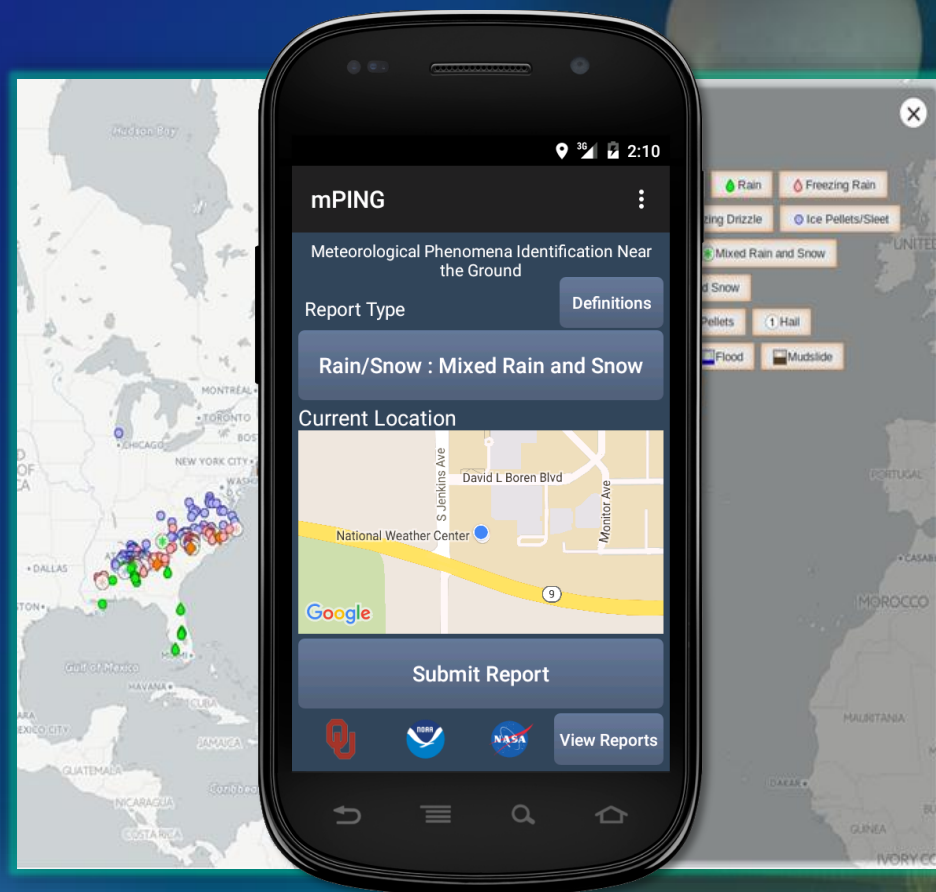


[www.CoCoRaHS.org](http://www.CoCoRaHS.org)

# Download the mPING App!

(**M**eteorological **P**henomena **I**dentification **N**ear the **G**round)

- Easily submit anonymous, real-time weather reports to NWS from any location with your mobile device!
- Precip type, flooding, hail, wind damage, etc.
- Reports plotted on interactive map available for anyone to view



[mping.nssl.noaa.gov](https://mping.nssl.noaa.gov)



Download on the  
**App Store**



GET IT ON  
**Google play**

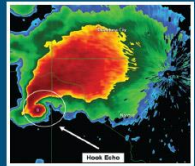
# Publications

- Full-page Wakefield Spotter Guide contains summary of all the important topics covered in tonight's presentation
- Full-color Weather Spotter's Field Guide available via our spotter web page:

[\*weather.gov/akq/skywarn\*](http://weather.gov/akq/skywarn)

*Easy to download  
onto your smart phone!*

## Weather Spotter's Field Guide



A Guide to Being a SKYWARN® Spotter

U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Weather Service

June 2011





# Spotter Certificate



**NWS Wakefield**  
**SKYWARN™**

▼ Get Your Skywarn Certificate

Did you attend one of our training classes?  
Enter your information below to receive your Spotter Certificate.

Note: We will NOT distribute this information outside our office.

First Name

Last Name

Class Attended

-- Select the Skywarn class you attended -- ▼

Submit

Reset

► Skywarn Class Schedule

<https://www.weather.gov/akq/SkywarnCertificate>

# Spotter Card

- Spotter cards are available online, if you so desire
- To create a card, click the link on our spotter webpage
- Remember the code and enter exactly the same:

**2021Skywarn**

**NWS Wakefield SKYWARN Card**  
[Weather.gov](#) > [Wakefield, VA](#) > NWS Wakefield SKYWARN Card

Wakefield, VA  
Weather Forecast Office

[Current Hazards](#) [Current Conditions](#) [Radar](#) [Forecasts](#) [Rivers and Lakes](#) [Climate and Past Weather](#) [Local Programs](#)

**Customize Your Weather.gov**

City, ST  
Enter Your City, ST or ZIP Code  
☐ Remember Me  
[Get Weather](#)  
[Privacy Policy](#)

**Instructions for printing your Skywarn™ Card online**

**Note:** You should have attended a recent NWS Skywarn™ class and received a passcode from your trainer. In the form below, enter your name as you want it to appear on the card, your training date, and the passcode. Amateur radio operators may optionally enter a call sign. Then, click on the Create Card button. A card with the information entered will appear below the form. Click the Printer-Friendly Version link to print the card. This card uses a background image, and some browsers don't print these images by default. Steps to enable these images in several different browsers are included below.

- **Internet Explorer** - Click the "File > Page Setup..." menu option. In the resulting "Page Setup" window, check the "Paper Options" section in the top left portion. There should be an option in this section labeled "Print Background Colors and Images", and it needs to be enabled.
- **Firefox** - Click the "File > Page Setup..." menu option. In the resulting "Page Setup" window, click the "Format & Options" tab. There should be an option in this section labeled "Print Background (colors & images)", and it needs to be enabled.
- **Chrome** - Click the "Print..." menu option. In the resulting window, there should be various settings on the left side. Click the "More settings" option toward the bottom. An option for "Background graphics" should appear along with other settings. The "Background graphics" option needs to be enabled.

If you have recently completed a Skywarn™ course and did not receive a password to generate your card, [please e-mail us](#). Include your name and the date of your training.

Your Name	Your Call Sign or spotter number (optional)	Your Training Date(Required) MM/DD/YYYY	Code	
NWS Wakefield		01/27/2018	2018Skywarn	<a href="#">Create Card</a>

[Printer-Friendly Version](#)

 National Weather Service  
Wakefield, Virginia  
SKYWARN Program

**NWS Wakefield**

Training Date: 01/27/2018

 Report severe weather to the NWS: 757-899-2415  
(limited number for severe weather reports only) 

***weather.gov/akq/skywarn***

# Spotter *Do's* and *Don'ts*

## DO

- ✓ Brief yourself with the latest information
- ✓ Understand the importance of your report
- ✓ Keep safety your #1 priority
- ✓ Express uncertainties and detail in your report

## DON'T

- Assume the NWS already knows what a storm is doing
- Put yourself in harm's way
- Withhold a storm report because of uncertainty
- Forget to pat yourself on the back...We appreciate your help!



# Thank You For Participating!

*Remember...we need to hear from you!*  
Your service helps us save lives.



[weather.gov/akq](http://weather.gov/akq)

[mobile.weather.gov](http://mobile.weather.gov)

## Follow Us On Social Media:



NWSWakefieldVA



@NWSWakefieldVA



# NATIONAL WEATHER SERVICE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



**National Weather Service**  
**Wakefield, VA**  
**[Weather.gov/Wakefield](https://www.weather.gov/Wakefield)**



**NWSWakefieldVA**



**@NWSWakefieldVA**